This theme takes on all the possible justice issues, social equity, multiculturalism, environmental activism, advocacy planning, etc. There are several acts that began in 1965 and 2015 is 50 years later...

The 1960s was a time in history where growth and development was rampant around the globe. Focus began to fall on urban renewal and the health of the environment as well as the impacts associated with human activities.

The sixties brought about civil rights movements globally and especially here in the United States. As freedom riders made their journey across the south in 1961 protesting the use of segregation in public transportation, urban planning was progressing by introducing zoning for the first time in the state of Hawaii. The year of 1964 brought about the enactment of the civil rights act that banned discrimination based on "race, color, religion, sex or national origin" in employment practices and public accommodations. 1964 was also the year that economic development was brought into the spotlight by President Lyndon Johnson declaring war on poverty. The civil rights movement was hit hard in 1968 due to the assassination of Dr. Martin Luther King, Jr. in Memphis, Tennessee. Despite this tragedy, regional planning was evolving and the Intergovernmental Relations Act of 1968 was passed, requiring state and sub-state regional clearinghouses to review and comment on federally assisted projects to facilitate coordination among the three levels of government.

Starting in the 1960s, the beginning of the women's rights movement resurged forward after being passive during the 1940s and 1950s. The civil rights protests spurred the women of the 1960s to renew the push for equal rights for women as well as minorities in educational and employment fields. Equality in politics, both in the United States and internationally, were also on the agenda for women's rights. During this time of women's rights movements, Jane Jacobs made her mark in planning by introducing "The Death and Life of Great American Cities" into the planning profession.

The world became increasingly conscious about the health of the environment during this time in history. In 1960, the first clean water act was passed by Congress as well as the first implementation of a Public Health Service study on air pollution from cars. The end of the sixties brought one of environmental health’s most influential accomplishments, the passing of the National Environmental Policy Act by Congress.

The 1960s will forever be known as a time of progress. Fifty years later we will look back to assess the progress we have made from the groundwork established in the 60s as we plan for the development that will take place in the next fifty years.
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Abstract Index #: 1
READY, SET, ACTION: USING ACTIVE LIFESTYLE CAMERAS IN PLANNING
Abstract System ID#: 4
Individual Paper

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There has been a vast improvement in technology, with ready availability of active lifestyle video cameras. These cameras are intended to capture in motion activities, such as bicycling, skiing, or motorbiking. One result of these cameras is a series of viral videos showing the challenges of cycling - for example Casey Neidstat's video, with more than 13 million views, about getting a ticket for not riding in the bike lane and Neidstat’s demonstration of obstacles in the roadway for cyclists (https://www.youtube.com/watch?v=bfE-IMaegzQ). This study demonstrates how active lifestyle cameras can be used to capture and share video from the point of view of a bicyclist. Distances are calibrated by taking video footage of marks on the ground at distances from one to ten feet away in one foot increments. This study measures a series of multimodal interactions during bicycle commuting trips, between February and April 2015. Bicyclists will capture video footage of bicycle commuting trips, traveling to and from the Ohio State University. The footage will be analyzed to determine for example, the distance between overtaking motor vehicles and cyclists. Using calibration footage, a transparency placed on a computer screen is used to create a ruler to measure the position of objects in relation to the bicycle. Model variables will include cyclist demographic characteristics, lane width, bicycle infrastructure, roadway characteristics, and behaviors of bicyclists, motorists, and pedestrians. This paper demonstrates how active motion cameras can be used to capture data, resulting in the ability to measure and analyze multimodal interactions.

References

Abstract Index #: 2
FORECASTING DECLINE: USING THE LAND TRANSFORMATION MODEL TO PREDICT VACANT LAND
Abstract System ID#: 115
Individual Paper

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Cities globally are experiencing capacious increases in vacant land. Vacant and abandoned spaces in cities are mounting rapidly, creating a vast problematic landscape for planners and designers. The process of urbanization...
is characterized by cycles of land use obsolescence and activation, primarily influenced by population alterations. For example, from 2000 to 2010, the total number of vacant housing units in America increased by over 4.5 million, an escalation of 44%. As urban populations fluctuate, holes can open up in once tight areas, resulting in vacant land accumulation. Simultaneously, as cities expand outward, they leave in their wake vacant land, derelict land, and building stock no longer for their original purposes.

Previous research suggests that spatial solutions, such as more accurate and proactive land use planning mechanisms, may be more effective than policies in dealing with the vacancy issue. Ironically, most solutions to vacancy are dependent upon return on investment, the same process which typically creates the condition. More recently, land use/land cover (LUCC) prediction models have emerged as a proactive attempt to gauge future urban land use changes. The rise in technological tools has increased the reliability of LUCC models, leading to a rise in popularity. They now help provide data for impact assessments, parameterizing urban changes processes, developing forecasts of future situations, and simulating policy scenarios.

Land use science is evolving and becoming more technologically driven. The use of computer-based models of land use change and urban growth has greatly increased. Digital models of LUCC have become powerful tools to help understand and analyze important connections between socio-economic processes and urban processes. Current research uses these models to support analyses of both causes and consequences of land use dynamics.

While great strides have been made in the development of land use forecasting methods, unfortunately, no singular model has been employed which specifically targets the global urban vacant land epidemic. There is an urgent need for new urban models which explore current problems such as the vacancy issue, if we are to reverse symptoms of urban decline. Current LUCC models are typically used to predict broad land uses and/or transportation changes and most predict urban growth, not decline. This research begins the process of testing LUCC models and their effectiveness in predicting future urban vacancies using the Land Transformation Model (LTM), an artificial neural networking mechanism in Geographic Information Systems (GIS). It is a prediction tool developed by Purdue University designed to simulate and predict urban land use change based on statistical techniques which compute land use change probabilities.

The LTM uses input patterns (historical raster inventories of land uses) and input factors (raster data sets for variables contributing to change) to forecast future conditions. Its accuracy in predicting vacant land conditions is tested through comparisons of the model’s predicted vacancies to actual vacancy occurrences, using time-series data from 1990-2010 in Fort Worth, Texas. Evaluation of the LTM’s accuracy is based on a three-tiered process: 1) comparisons of actual vacancy rates to predicted vacancy rates using 5 year input patterns but differing amounts input factors, 2) examination of LTM based output statistics and 3) assessment of output similarities for predicted vacant land for the year 2020 using differing input patterns but identical input factors. The test of the LUCC model in this study had mixed results. There was an acceptable level of accuracy in outputs compared to other studies but the model still has several limitations that need to be addressed before it can be more widely utilized to predict decline, not growth. This will allow for more proactive decisions to better regulate the process of urban regeneration.

References

EVALUATING INTERNET-BASED PUBLIC PARTICIPATION GIS AND VOLUNTEERED GEOGRAPHIC INFORMATION FOR ENVIRONMENTAL PLANNING AND MANAGEMENT

Abstract System ID#: 196
Individual Paper

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Public participation is a vital part of collaborative environmental management and planning. While our society is rapidly moving towards digital communications, with the development of the Social Web (Web 2.0) and the pervasiveness of personal computers and mobile devices (e.g., smart phones and tablets), the Internet-based communication platform has emerged as a key channel for public participation. An Internet-based Public Participation Geographic Information System (PPGIS) is an affordable and accessible tool for citizens to provide location-based Volunteered Geographic Information (VGI) in environmental management. Based on a conceptual model, this study uses the SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis methodology to qualitatively evaluate user, information, and site use of six cases with Internet-based PPGIS. This study reviews each case’s website to collect descriptive data for the case analysis. The results of this study show that user numbers do not have a significantly strong relationship with data submission numbers, since active users had the highest number of contributions. The most urgent task of using Internet-based PPGIS to attract citizen scientists is to invite and retain long-term and active contributors, and to change interested users into long-term active contributors.

References


INTEGRATING ENVIRONMENTAL DATASETS AND CITIZEN SCIENCE FOR ENVIRONMENTAL PLANNING: LEARNED FROM THE PIONEERING MOBILE INFORMATION PLATFORMS

Abstract System ID#: 197
Individual Paper

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Information channel is dramatically shifting from web-based information platform to mobile platform. However, scientific environmental datasets are increasingly becoming more complex and larger. Users have limited options and skills to smoothly access the geospatial environmental data through mobile devices. Planners and citizens have to rely on traditional devices (e.g. GPS unit) or specific software (e.g. GIS) to access these environmental datasets, including Soil Survey Geographic database (SSURGO), Flood Insurance Rate map (FIRM), National Wetland Inventory (NWI), water quality dataset (STORET). Most of the environmental datasets are still in one-
way top-down communication style. This project conduct case studies to analyze the site condition, user contribution, and information distribution of the pioneering, scientific-based, environmental-oriented, mobile information platforms in the United States, including the CoCoRaHS, What’s Invasive!, eBird, OakMapper, Field Photo, Leafsnap, and Nebraska Wetland projects. Through analyze the sites, users and information on these mobile information platforms, the results indicate that long-term active users are the major contributors to reporting grassroots environmental information to the scientific datasets. Lack of motivation and long-term resources commitments are the major challenges in citizen science projects. A successful environmental project need to incorporate both online and off-line activities with professional networks. Data quality and verification is the uncertain and needs more attentions in citizen science projects. The findings of this study provide insightful recommendations to further development of mobile information platform and citizen engagement for environmental planning and management.

References

Abstract Index #: 5
THE USEFULNESS OF ONLINE PARTICIPATORY TOOLS IN PLAN MAKING
Abstract System ID#: 215
Individual Paper

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Local governments and planning organizations are increasingly using Online Participatory Tools (OPTs) for engaging citizens in plan-making processes. However, our understanding of whether and how planners find these tools useful in these processes is still limited. The current literature falls short in understanding how the capacities of planning organizations and online participatory tools influence the tool incorporation and usefulness in plan-making processes.

In this study, I examined the usability of online participatory tools in plan-making processes through exploring planners’ perspectives. In particular, I asked the following two questions: (a) How and why planners use Online Participatory Tools (OPTs) in plan making?, and (b) What factors affect planners’ satisfaction of using OPTs in plan making and how? The following theories informed my research: participatory planning theories are used to define criteria for exploring the purposes and methods of using new participatory methods (Evans-Cowley & Manta Conroy, 2006; Forester, 1989; Innes & Booher, 2010), organization theories helped with defining organizational factors that influence technology adoption (DeSanctis & Poole, 1994; Flyvbjerg, 2006), and planning support systems theories helped with defining factors that influence the capacities of new technologies in facilitating information sharing and social interaction (Klosterman & Pettit, 2005).

I surveyed 106 planners (58% response rate) to explore the stages and purposes that the tools are used for, the ways in which the tools are integrated with other participatory methods, the results of using the tool, and the level of satisfaction with using the tool. In addition, I interviewed 44 of the planners, who participated in the survey, for more detailed exploration of how and why they used Online Participatory Tools (OPTs) in plan-making.
Using archival research, the participant planners were selected based on the following criteria: the planners should have used one of the three OPTs (MindMixer, PlaceSpeak, Shareabouts) in one plan; the plan should have passed at least the visioning stage; the plan scale should have not been larger than regional; the plan should have had a focus on land-use, environmental planning, transportation planning, economic development, or community development.

Employing a mixed-method approach, I analyzed how different organizational and technological considerations are related with OPT usefulness in plan-making. I used descriptive statistical analysis methods to analyze the survey findings and explore why and how the OPTs are used by planners; and regression analysis methods to examine what factors influence planners’ satisfaction of using the OPTs in plan making. In addition, semi-structured content analysis and interpretive discourse analysis methods are employed to explore how planners interpret the usefulness of OPTs.

The findings of this study show that planners find OPTs useful primarily for logistical and rational purposes of conducting participatory processes, including validating their decisions and making sure about the consistency of their plans with citizens’ interest. While some planners find the OPTs’ generated information valuable due to its depth and novelty, most planners find it valuable since it politically empowers them to back up their decisions. Not only the organizational and technological factors influence the OPTs’ usefulness, but also the stages and purposes in which OPTs are used for.

OPTs are not used only as information gathering tools, but also as tools that allow planning organizations to create and test scenarios, validate their thoughts and decisions, and avoid possible conflicts. However, for this process to be effective they require either collaborating with other institutions or equipping their internal organizational capacities. OPTs do not solve the ever-lasting challenge of participatory planning, but can influence this process by empowering planners not only to make more confident decisions, but also to have stronger voices in the political environment.

References


Abstract Index #: 6

MITIGATION OF THE URBAN HEAT ISLAND WITH GREENING STRATEGIES: A NONLINEAR PROGRAMMING MODEL

Abstract System ID#: 238
Individual Paper

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Rapid urbanization enhances the urban heat island (UHI) intensity by displacing vegetation with impervious surfaces. The resulting significant increase in surface temperatures (Oke, 1982; Stone, 2012; Takebayashi and Moriyama, 2012) negatively impacts urban population through heat stress health problems, increased power plant pollution, greenhouse gas emissions, in ozone formation. Until now, much of the literatures has focused on 2-dimentional UHI analysis, but recent research (Chun and Guldmann, 2014) has achieved a better understanding
of how urban features influence land surface temperatures (LST) in the 3-D space, using Geographical Information Systems (GIS) and spatial statistical analysis.

Building on this earlier research, this study uses a non-linear programming (NLP) model for developing a UHI mitigation strategy with tree planting in the 3-D space. The NLP model, derived from a spatial statistical model estimated over a grid, selects rooftop and ground areas for greening in order to maximize total or location-specific temperature reductions, subject to a greening cost budget and other constraints related to land cover transformations. This novel approach is applied with data characterizing the urban core of the city of Columbus, Ohio.

The study involves the following steps: (a) developing a 3-D city model, (b) creating diverse urban geometric parameters, (c) performing statistical analyses, and (d) implementing an optimization algorithm to develop greening strategies. Finally, the model resolves the location-allocation problem for new vegetation and provides a visualization of greening optimal locations as a decision-making support tool for UHI mitigation.

References

Abstract Index #: 7
A GRAVITY MODELING APPROACH TO INTERGRADE HIGH-SPEED RAIL AND SEISMIC HAZARD MITIGATION FOR FUTURE LAND-USE ALLOCATION IN CALIFORNIA
Abstract System ID#: 364
Individual Paper

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Transportation investment has been an important consideration in land-use planning. California high-speed rail project, for instance, will be changing regional and urban structure of the state (Sands, 1993). With the capable train speed of 200 mph, it would be able to approximately achieve the express travel time from Los Angeles to Fresno by 1.5 hours, and to San Francisco by 3 hours. Due to the improved transportation network, one might wonder if the high-speed rail would either enhance the polarization of San Francisco and Los Angeles as two cores of the state or the other way around (i.e. the reduced travel time would be beneficial for the in-between region the San Joaquin Valley). Moreover, these two largest California metropolitan areas have been under great seismic threats for years. Planners should be able to assess such high-speed rail impacts and the resulted seismic risks due to disproportionally allocating future growth for high hazardous locations. This paper is therefore to integrate these two regional concerns into a gravity model for forecasting future population, employment, and land-use allocation, under several specified scenarios.

Modern metropolitan areas are highly complex entities. Models have been used to test economic theory and develop knowledge about the urban and regional system behavior (Iacono et al., 2008). For instance, gravity models recognize the pattern that trips between two locations increase as the activities in the origin and destination areas increase and the travel cost/time decreases. A gravity model, TELUM, is selected here to deal with the interrelated process of such urban and regional changes. TELUM, a GIS based system successor of
DRAM/EMPAL model, has been widely applied for numerous cities in the world, particularly on the relationship between transportation network changes and the resulted land-use allocation for economic activities (Casper et al., 2009; Pozoukidou, 2014). In TELUM, the DRAM residential model is applied together with the EMPAL employment model, and then both are linked to a suite of transportation model for allocating future growth (Putman, 2010).

In our study, TELUM is used to better understand the impacts of transportation investment and seismic hazard mitigation on economic activities and land-use development for six 5-year increments between 2005 and 2035. Several scenarios are designed to account for regional structure changes: 1) natural growth without any policy effects; 2) California Haigh-Speed Rail (CHSR) project; 3) seismic hazard mitigation together with the CHSR project. Results will reveal how these changes shape future development for the state of California. This application of gravity models would provide technical and policy insights for planning future growth.

References


Abstract Index #: 8
EXPLORING THE USE OF THREE-DIMENSIONAL URBAN SIMULATION TO MODEL DEVELOPMENT OPPORTUNITIES BASED ON SUITABILITY MODELING AND FBC REGULATIONS
Abstract System ID#: 410
Individual Paper

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Problem: While Form-Based Codes (FBC) have started to gain traction in many communities throughout US, the use of three-dimensional (3D) design scenario modeling to evaluate the applications of FBC regulations has been limited. Likewise, development of 3D physical scenarios based on population allocation and land-use suitability analysis tends to be limited mostly due to technological barriers.

Existing Research: The existing work in this area is mainly focused in comparing FBC with conventional zoning methods. The current Land-Use Conflict Identification Strategy (LUCIS) research allocates future population growth at parcel level based on future population projections and land-use development suitability and conflict resolution. However, development of 3D scenarios that incorporate FBC and results of suitability modeling and allocation scenarios is still unexplored.

Research Objective: This research aims to explore the use of procedural 3D modeling to create building envelope opportunities based on FBC regulations and LUCIS results and population allocation scenarios.

Methodology: Several computer generated architecture (CGA) code-based templates (or procedural 3D models) were created using CityEngine software, an extension to ArcGIS. The first template generated building development envelopes that meet local FBC regulations. The second building development envelopes were generated based on LUCIS suitability results and population allocation scenarios. In the latter, the envelopes were modeled by drawing on the number of stories of the surrounding buildings, their value and the average
Results & Findings: The 3D modeling results showed that FBC increased urban density. While the procedural 3D models at this time represent only maximum development opportunity envelopes, the use of this technology show great promise for simulating a variety of physical urban design scenarios including infill and redevelopment based on suitability results and allocation scenarios. More broadly, procedural 3D modeling shows promise to inform geodesign, a framework that integrates geospatial technology into the planning and design process.

Contribution: The results of this research can be applied to evaluate the existing FBC regulations considering land-use suitability, comparing different types of urban forms, providing future urban development scenarios for further analyses, and encouraging public participation in planning process.

References

Abstract Index #: 9
ANALYTICAL METHODS IN GIS AND INCLUSIVITY IN HISTORIC PRESERVATION: STILL A LONG WAY TO GO IN BROOKLYN, NEW YORK
Abstract System ID#: 514
Individual Paper

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This paper uses analytical methods in GIS to explore the social landscape of historic districts in Brooklyn, New York, and reveals that though a paradigm of inclusivity seems to have emerged in 21st century New York, this landscape remains quite uneven today. Since the 1960s, scholars have recognized that creating historic districts may catalyze population change, with a trend toward reducing the diversity of the population within the area over time (McNulty and Kliment, 1976); however, empirical research on the topic is still limited (Ryberg-Webster and Kinahan, 2014). This paper seeks to address and countervail a methodological barrier to satisfactorily exploring this question. With historic district shapefiles, Census data, and GIS, we can now readily access information about the populations in a city's historic districts and compare it to those in neighboring but non-designated areas; we can also compare rates of change between these two subsets of the city. These cross-sectional and longitudinal analyses respectively help us to better understand the social dynamics of Historic Preservation in today's urban environments.

In this paper, I focus on the nineteen (19) neighborhoods in Brooklyn, New York in which the borough’s historic districts lie, and I approximate a mutually exclusive "Historic District population" and "Non Historic District population" using Census block groups. I then use 2009-2013 American Community Survey data to ask three main questions: 1) Are there significant differences between these two population subsets along several demographic and socio-economic variables including population density, tenure, racial composition, educational attainment, income, and rent?; 2) With a rather astounding fourteen (14) of Brooklyn’s thirty-one (31) historic districts designated since 2000 (Brooklyn’s first historic district was designated in 1965), has the social landscape of Historic Preservation become more inclusive in the 21st century?; and 3) Since 2000, have the "new" historic districts begun to resemble the “old” historic districts in terms of their population characteristics? With the third question, I am looking for either signs of convergence, or, on the contrary, signs of persistence—if historic districts may actually be stemming the tides of change in 21st century Brooklyn.
I discover that in Brooklyn, New York, there appears to be a new paradigm for preservation beginning in the 21st century that strove toward greater inclusivity in the historic district landscape; and, furthermore, that creating new historic districts seems to be helping some communities hold steady amid rapid development and change around them. (The precise mechanisms at play form another aspect of this research). However, according to the most recent Census data, these designated areas still seem to exhibit significantly advantaged socio-economic characteristics compared to their non-designated neighbors, which should compel preservation scholars to continue to think critically about Historic Preservation, diversity, and inclusivity. If preservationists wish to see a city's historic districts representative of its population on the whole, more work needs to be done toward this end. If establishing a representative population base in a city’s historic districts is not a goal, policy implications of this research may reverberate in other arenas of urban governance, such as Cultural Affairs. Historic Preservation has a history of scholarship and practice devoted to diversity and inclusivity (Lee, 1987; Kaufman, 2009; Tomlan, 2014); by carrying out empirical research about the social dynamics of historic districts using 21st century data and technology, we can develop a much deeper understanding of where we are with those themes, and where we might want to go.

References

Abstract Index #: 10
CREATING A SPATIAL GENTRIFICATION INDEX
Abstract System ID#: 550
Individual Paper

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Over the past 50 years, scholars have focused on three questions about gentrification: (1) its causes (2) how it changes over time, and (3) its impact on neighborhoods. Despite extensive study, little agreement exists concerning gentrification’s causes and impacts, mainly because measures of gentrification vary across studies. The choice of appropriate measures is not always clear, given the varied types of change in social structure and housing characteristics among different cities or even in different neighborhoods within the same city (Beauregard, 1990). Additionally, studies of gentrification are usually conducted on the specific metropolitan-area, making the employ of such measures across contexts untried.

Scholarly have attempted to develop the measuring methods of gentrification. Specifically, Wyly and Hammel (1998) find that remarkably similar change in socioeconomic composition (e.g. income, education, occupation) in different cities occurs in gentrifying areas between 1960 and 1990. However, their study only includes a limited set of socioeconomic measures and housing characteristics associated with gentrification, which is a drawback. Using Wyly and Hammel (1998) work as a starting point, this paper aims to measure gentrification in the United States between 1990 and 2010 by widening the possible indicators from related research (e.g. Melchert & Naroff (1987), Knotts & Haspel (2006)). The paper will consider trade-offs among a variety of indicators, connecting a broad spectrum of indicators that are associated with the complexity and universality of gentrification. The paper creates a Spatial Gentrification Index (SGI) and uses it to illustrate variations in the degree of gentrification.

The research employs a quantitative methodological design to create the index and test its validity. First of all, multivariate analysis allows for the selection of key determinants. Second, I calculate the SGI for every block
group in the top 250 MSAs throughout the US from 1990 to 2010. Finally, I assess the relationship between SGI and changes in neighborhoods. In addition, I will map the spatial distribution of gentrification throughout the US visually by using Geographic Information System (GIS), which enables to use color ranges to display different values on a spatial map. The degree of gentrification will be classified by quantile and changes in demographic and socioeconomic compositions, housing affordability will overlay to demonstrate the relationship.

References

Abstract Index #: 11
WHERE WOULD PEOPLE LIKE TO TWEET? - ASSESSING THE SPATIAL ASSOCIATION OF BUILT ENVIRONMENT AND TWEETS
Abstract System ID#: 590
Individual Paper

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People enjoy popular and vibrant places. An essential part of creating these popularity and vibrancy would be the optional and social activity. Since Jane Jacobs and Jan Gehl, there have been numerous studies on optional and social activity in urban spaces. Most of these studies are qualitative and small scale. It's mainly because the traditional data collection methods for interview, survey and observation don't allow the researchers to produce a large sample size. Therefore, the efficiency of the statistical model cannot be secured. More recently, the era of big data offered us a new opportunity. Nowadays many people post their location and activity on social media that could be considered as a representation of their optional and social activities.

In this study, we aim to examine the relationship between the spatial distribution of tweets and physical environment features at a census block group level in four cities. We would like to analyze the significance and magnitude of the association. Using multiple sources, we create a database of built environment in Chicago, Birmingham, Oakland, and Minneapolis. All geo-coded tweets in these four cities are collected for seven days from September 11th to September 18th via the Twitter API system.

To pursue the research question, first we will employ the hot-spot analysis to compare the spatial cluster of tweets and food/beverage stores. Secondly, we will construct a set of measures on built environment such as density, diversity, design, destination, regional structure and socio-demographic aspects at census block group level based on the theory of urban form. Thirdly, we will employ a multi-level regression model, with the twitter counts in each census block group as the dependent variable and other locational and demographic variables as independent variables. Finally, the coefficients will be standardized to compare these factors’ impact on tweets activities in the four cities.

For a long time, planners and urbanists have been discussing how to build vibrancy in a city. This article may initiate a new quantitative perspective to evaluate the issue. The result will offer us more understandings of how built environment is related to optional and social activity today in the information society. It can tell us which factors are positively linked to these activities and which character contribute the most among them. Planning field already starts seeking the potential application of big data to help understand the urban fabric. Most of
them remain as descriptive now. This study will provide an empirical and statistical evidence to guide urban planners in decision-making.

*Part of the built environment data is provided by Carolina Population Center at University of North Carolina – Chapel Hill

References


Abstract Index #: 12

EXPLORING THE USE OF ‘DIG DATA’ FOR ANALYZING TRAFFIC-RELATED AIR POLLUTION IN CHINESE CITIES

Individual Paper

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Beijing and other major Chinese cities have been experiencing severe haze pollution characterized by a thick haze layer covering these cities for days, largely due to weather patterns and emissions from traffic and industrial plants. “Emerging evidence specifically links the traffic-related component of air pollution to negative effects on health” such as asthma, lung cancer, and cardiovascular risk (Brauer et al., 2013). Recent studies have suggested that traffic is the main cause for urban air pollution (Guo et al. (2014).

Urban transportation systems and their relationship to urban form is at the heart of developing ecologically-based, sustainable, and livable cities (Kenworthy, 2006). Previous studies have assessed “the association between health impacts and simple measure of proximity to traffic based on observations of steep pollutant concentration gradients as a function of distance to roads” (Henderson et al., 2007). However, data and method used in these studies are not sufficient in capturing the variability in pollutant concentration and traffic volume over time. They cannot efficiently model the association between pollutant measures and land use characteristics at a high resolution in large areas. Land use regression has been used to predict ambient air pollutant concentrations (Henderson et al., 2007) and is potentially useful for the temporal prediction at a high spatial resolution to help assess spatiotemporal patterns of traffic-related pollution. Most land use regression, however, “neglected the variation of air pollution” over the study period (Fang and Liu, 2011). They “lack fine-scale temporal resolution for predicting acute exposure and regulatory monitoring provides daily concentrations, but fails to capture spatial variability within urban areas” (Johnson et al., 2013). In addition, length of highways or major roads are generally used (with a few studies used traffic density) with insufficient consideration on variation of traffic volumes over time.

“With the recent rapid development of internet and cloud computing, we are entering the era of ‘big data’” (Yin et al., 2014). “Big data’ was defined to account for the effort to make the rapidly expanding amount of digital information analyzable and “the actual use of that data as a means to improve productivity, generate and facilitate innovation and improve decision making” (Yin et al., 2014). The GPS equipped taxis are mobile sensors that can help collect traffic information. In Beijing, there has been approximately 68,000 licensed taxis and GPS units were installed on many of them. Websites such as Baidu provide real time traffic information on highways
and major roads, updated every 15 minutes. Other websites such as Aqicn provides information on air quality and weather from air quality monitoring stations around the world updated every half an hour. Weibo information can be used to extract land use related information. All of these become a source of ‘big data’ on real time air pollution and traffic and have a great potential to help understand the association between traffic patterns, land use patterns, and traffic-related pollution in major Chinese cities.

This study aims to explore the use of land use regression and ‘big data’ including Baidu real time traffic data for the past half year, air quality data from Aqicn, taxi GPS data, and Weibo data on the analysis of the traffic patterns, land use patterns, and traffic-related air pollutions in Beijing, Shanghai, and Wuhan. Results can help develop policy guidelines that incorporate health concerns and encourage integrated land use – transportation planning to increase active transportation to decrease air pollution and greenhouse gas emission, and reduce traffic congestion, especially targeted to specific areas for vulnerable populations.

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A HISTORICAL DATA-BASED MULTIPLE CRITERIA EVALUATION METHOD FOR LAND SUITABILITY ANALYSIS

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Multiple Criteria Evaluation (MCE) is a multi-attributes decision making tool, in which the impacts of criteria are evaluated according to the relative importance (weights) of individual criterion (Rao, 2005). The MCE output is often used in land suitability analysis and land use modeling, such as Cellular Automata (CA)-Markov model. The MCE process mainly includes criterion selection, suitability score assignment, weight assignment, and linear weighted combination. The choice and use of MCE criteria include interview, inquiry, survey, and in-depth literature review (Store & Kangas, 2001). The quantification methods used for selection and weight assignment most are Delphi, Analytic Hierarchy Process (AHP), Principle Component Analysis (Lee & Chan, 2008), or Entropy method. The criterion scores are normally assigned using either specific values or fuzzy logic method (Edmundas & Jurgita, 2007). The common problem in these approaches is that local historical data are not used in selecting and weighing criteria and assigning scores to each criterion. The goal of this research is to explore the feasibility of using historical data of a study area to quantitatively select, weigh, and score criteria in the MCE process. Going through the literature extensively, we have not been found a similar research.

We propose to use the Logistic regression model to select and assign standardized scores for each criterion used in MCE. Logistic regression model has been widely used to predict probability of land use changes for a specific
land use class based on a set of scores on the predictor variables. In this research, the probability of each criterion will be converted into the degree of suitability of the criterion. Data used in this research include 2000 and 2010 parcel level land use for Hamilton County, Ohio. The land use categories include residential, commercial, agricultural, undeveloped, and others. The list of potential MCE criteria is compiled from literature review. Examples of the criteria are slope, population change, median household income, distance to highways, etc. Each potential MCE criterion is operationalized to fit a logistic regression model. If the fitted model is statistically significant at the 0.05 level, the criterion will be selected, and then the probability of the criterion causing land use change will be used to assign scores. We then use the Entropy method to determine the weights of each criterion, which is proportion to the relative magnitude of change over the overall system. The MCE output is then used in a CA-Markov land use model to simulate land use changes from 2000 to 2010. The simulated 2010 land use is compared with the 2010 land use data. The goodness of fit is measured with Kappa Index and overall accuracy (correctly simulated cells over total cells). We use ArcGIS, SPSS and IDRISI in this research.

The result shows that the use of MCE criteria derived from the historical data for the study area in the CA-Markov model simulation produces reasonable goodness of fit (about 0.83 for Kappa Index and 87% for overall accuracy). The literature shows that the desirable goodness of fit is greater than 80% for overall accuracy (Mondal & Southworth, 2010). The major advantage of the method developed in this research is that the criterion selection, weights, and criterion scores are all derived from local data, which reflects the actual historical trend. Understanding them serves as the basis for developing different planning scenarios which are represented by different MCE criteria and their weights and scores.

References

Abstract Index #: 14
CLUSTERING U.S. URBAN PLANNING FACULTY: PEER IDENTIFICATION AND EVALUATION
Abstract System ID#: 844
Individual Paper

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This paper uses urban planning faculty publication data to create clusters of scholarly peers. The research builds upon a previous analysis presented at the 2014 ACSP meeting in Philadelphia, that used the Guide to Undergraduate and Graduate Education in Urban and Regional Planning to examine the knowledge domain(s) of planning. The previous analysis used the areas of expertise and interests for over 900 regular faculty listed in the Guide. These were self-reported areas of teaching and research interests that were used to characterize specializations within urban planning programs. The current analysis focuses instead on networks of individual planning faculty that result from not only their publication topics but also their years of service. The resulting sets of planning faculty peers are those individuals that can be compared directly with each other not only based on research but also their seniority (years) and rank (title). The results can be used to evaluate faculty in terms of scholarly performance and also help planning programs consider the contributions of their faculty.
ADVANCED TIME SERIES AND SPATIAL DEPENDENCE MODELS FOR POPULATION FORECASTING

Abstract

Forecasts of population and employment are fundamental building blocks for traditional approaches to land use planning (Berke, Godschalk, and Kaiser 2006, pp. 117-146) and transportation planning (Meyer and Miller 2001, pp. 341-371). If the forecasts are substantially low, planners will not allocate sufficient suitable land for different land uses and transportation infrastructure will be under-sized resulting in avoidable congestion. If the forecasts are too high, development may sprawl across a larger-than-optimal area and the government will over-invest in unnecessary infrastructure.

Forecasting even such a basic variable as aggregate population is inherently difficult due to the multi-decade time frame plus the necessary but often questionable forecasting assumption that the future will resemble the past. Richard Klosterman believes that these problems are so severe that planners should “… abandon the futile effort to predict what the future will be …” (Klosterman 1994, p. 164) and replace traditional forecast-based planning with scenario planning built upon public participation and a range of narrative storylines.

However, this paper will argue that recent advances in business forecasting models and spatial analysis methods can (1) achieve better accuracy than traditional projection approaches, (2) provide tools to address projection uncertainty, and (3) incorporate additional predictive variables that can contribute to improved decisions (Hopkins 2001, p. 70-74). We demonstrate our approach by developing projections for 3,100 U.S. counties using base data from 1969 to 1993 and projecting forward to 2013. For comparison purposes we also apply a set of traditional projection methods (Rayer 2008), then calculate and compare mean absolute percent errors (MAPEs) and mean algebraic percent errors (MALPEs).

There are three components to our approach. First, for each county we generate three ARIMA, two exponential smoothing, and two damped trend projection models. The seven models are averaged together to produce a single 2013 forecast for each area. Second, we incorporate spatial dependence into the forecasts by applying a regression model using a dependent variable of a county’s observed change ratio (actual 2013 population divided by actual 1993 population) and independent variables of (a) the forecast change ratio (forecast 2013 population divided by actual 1993 population), and (b) the forecast change ratio of all edge-contiguous counties. Third, we add employment and per capita income as additional independent variables using two forms of each variable: the variable’s forecast change ratio of the county and the variable’s forecast change ratio for all contiguous counties. The models use public time-series data from the Census Bureau and Bureau of Economic Analysis; R, which is a free statistical package; and the "forecast" package for R, which is also free.
Finally, we apply statistical confidence limits derived by averaging the seven projection model confidence limits, and test them against the actual distribution of 2013 population values. We conclude by suggesting that population forecasts should include 50% confidence limits in order to present planners and decision makers with a most-likely forecast, a plausibly-high forecast that would be exceeded 25% of the time, and a plausibly low forecast under which the actual population value will fall 25% of the time. Plans that are developed around all three forecast values are more likely to produce desirable outcomes under a reasonable range of possible population futures.

References

Abstract Index #: 16

INDIVIDUAL MOBILITY INFERENCE USING SPARSE CDR DATA: A DATA FUSION APPROACH

Abstract System ID#: 887
Individual Paper

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Recent years have seen an increasing body of literature of using CDR data to estimate mobility patterns at the individual level (e.g. Gonzalez et al. (2008)) and OD matrices at the system level (e.g. Calabrese et al. (2011)). However, there is a lack of systematic discussions regarding limitations of the data. One critical limitation of CDR data for mobility analysis is sparsity. For majority of users, their mobile phone records are sparsely and irregularly distributed over time, leading to certain periods of time, or gaps, when we have no observations of their whereabouts. With these gaps, our observation of the user’s spatiotemporal profiles would be incomplete, and our estimation of the user’s mobility patterns based on such incomplete profiles would be prone to biases, an issue receiving little attention from existing literature of human mobility analysis using CDR data. In this work, we bring attention to the sparse sampling issue of CDR data. The objective of the paper is to develop a methodological framework to address this limitation of CDR data by inferring individual mobility during gaps based on statistical models.

In this paper, we propose a data fusion approach to estimate models for inference of individual mobility during gaps. While CDR datasets typically contain records from a large population, observations for each individual are generally sparse. In order to estimate models, we need to combine CDR data with complementary data (without the same limitations) that provides richer information for a subgroup of individuals, such as GPS data. Thus we can extract a labeled training sample, with feature matrix X from large-scale data and label vector Y from complementary data. In reality, however, such complementary data is costly to collect, especially when the data collected needs to be individually matched with a subset of CDR data.

Despite of the practical challenge, it is still possible to apply the same data fusion approach even with only CDR data. This is because multiple types of mobile phone transactions recorded in CDR data, including phone calls, short messaging service (SMS) messages, and data activities. Unlike phone-call and SMS activities, user data activities do not always require user initiation or user participation (Ranjan et al. 2012). On devices with enabled cellular data capability, a plethora of mobile applications automatically make periodic or sporadic connections to
the 3G/4G cellular network. These data activities are recorded as data access records. Therefore, in absence of complementary data, we can still make inference of these users’ mobility during gaps, by extracting X from phone-call and SMS records and Y from data access records.

The proposed data fusion approach is demonstrated in solving a specific problem – hidden visit inference. A visit can only be revealed by CDR data if there is a mobile phone record associated with it. If a user makes a visit to a location but does not generate any phone record, this visit is hidden to us. The objective is to infer whether there exists a hidden visit between two consecutive revealed visits. From a CDR dataset of Jinan, China, we select a sample of 10,000 gaps, one for each mobile user. Four different data mining techniques are used for modeling – logistic regression, random forests, neural networks, and support vector machine. Using each of the methods, we build a model to classify gaps as having a hidden visit or not. The predictive performances of the four models show significant improvement (18~20%) over the naïve assumption (assuming no hidden visit).

The new approach proposed in the paper will help provide us a more complete picture of individual mobility profiles and improve our ability to infer travel demand using sparse CDR data, especially when no complementary data is available.

References


Abstract Index #: 17
ACCURACY AND USEFULNESS MEASURES FOR LAND-USE CHANGE (LUC) MODELING TO FACILITATE STRATEGIC SUSTAINABLE DEVELOPMENT (SSD)
Abstract System ID#: 927
Individual Paper

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It has been almost 30 years since scholars started using CA based models to assess and project changes in urban land-use patterns (White and Engelen, 1994). First iterations of these land-use change (LUC) models were severely hampered by land-use data availability. Since the early 2000’s however, data availability issues have been receding. In fact, newly updated land-use/land cover maps of the US have enabled time series analysis of land-use changes that will be useful for back casting, forecasting, and LUC model calibration.

Past (and current) approaches to calibrating and verifying LUC model accuracy has been typically conducted by: comparing aggregated numeric results, visual validation, cell-by-cell overlay, or by aggregating change by spatial subdivision (such as 30-minute travel zones) (Xia and Ye, 2010). These approaches have some noted technical and practical deficiencies including: difficulty tracking distribution outcomes, lack of objectivity, scalar accuracy issues, and arbitrary subdivision scales and boundaries (Batty and Xie, 2005).

In this paper, we propose improvements to the spatial subdivision approach to calibrating and verifying LUC models. The first improvement is in catchment area identification. In our new technique, catchment or subdivision sizes can vary within a large range of values using kernel density methods to cluster variables and dissolve boundary conditions. Our second improvement addresses spatial structure. This technique applies manifold clustering to small size subdivisions. After clustering the subdivisions we can see structural information
s such as where centers of development are and how many clusters of growth have emerged) of the simulation and actual models in order to inform if the simulation model grasps the core developmental structure of the region. Finally, we use our new accuracy measure approaches to test for usefulness. We do this by comparing applied accuracy tests to both a “reference” and a “least impact” LUC scenario. A comparative analysis is then used to evaluate whether model results have been effectively and usefully applied in the specific planning context.

We apply these improvements to an analysis of the Land-use Evolution and Impact Assessment Model’s (LEAM) simulation results of the Chicago metro region. We use 2011 National Land Cover Database (NLCD) data to measure LEAM’s simulation model performance and for calibration, verification, and usefulness purposes.

References


Abstract Index #: 18

ENHANCING WATER RESOURCES PLANNING WITH PARTICIPATORY VISUALIZATION OF COUPLED HUMAN AND HYDROLOGICAL SYSTEMS

Abstract System ID#: 1006
Individual Paper

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We present the findings of a 3-year project on the use of visualization tools in collaborative water planning efforts in Northeast Illinois. We set out to understand how such tools allow people planning for future water sustainability to jointly see the hidden effects of land- and water-use decisions on water supply, and how such visualization contributes to collective deliberation and policy innovation. We first built a developmental participatory agent-based approach, where stakeholders worked in small groups around a progression of coupled land-use and hydrological models—from highly abstracted to geographically detailed—to recognize and assess the impacts of proposed policies. Stakeholders learned how to use the models, understand the relationships among their components, interpret the meaning of their outputs, and modify the models with new insights from the discussions and their experience. Stakeholders jointly witnessed how water shortages could not be prevented by their preferred strategies if residential expansion continued. Despite the improved understanding, participants resisted policy innovation beyond the strategies they already knew. Adding details to simplified models did little to reduce participants’ cognitive dissonance and increase collective trust in the evidence they had generated. Instead, they challenged the validity of the models and of the research team. The instructional setting was not conducive to such agency, but rather pitted some stakeholders against the researchers.

We re-designed the participatory process so that researchers facilitated—rather than instructed—participants’ collaborative use of available online data and mapping resources, rather than the complex models used in our first trials. Discussions focused on the inadequacy of available data as a resource for current engineering and
management work. The participants demonstrated knowledge of the systemic connections linking aquifers and streams across the region, but they framed the planning problem within their boundaries of their profession and jurisdiction. Attention to causal linkages was reverse engineered from the problems they could control at work. In the absence of a causal model connecting to the larger region, they proposed plans for measuring and monitoring that would primarily serve local needs. Clever water management only postponed local water shortfall in severe drought conditions. While the facilitation style was key in overcoming resistance to new insights, we noted a critical need for dynamic simulations of causal models, for which the challenges encountered in our agent-based modeling trials need to be addressed.

Towards this end, we designed interfaces to support simultaneous collaborative use of hydrological simulations with mobile devices or paper-based tangible user interfaces. Novice users were exposed to a flooding model developed by our team to help them understand causes and impacts of urban flooding, and to allocate green infrastructure to address this problem. Participants preferred the hands-on tactile manipulation of land cover, especially if they did not know each other well, serving as a boundary object for discussion and action. The tangible interface allowed participants to use gestures to discuss dynamic, emergent outcomes, like the way runoff patterns changed, and generate solutions incorporating knowledge of these dynamics. Moreover, some users designed solutions that were as effective as those proposed by experts. These findings highlight the power of such tools to enhance collaborative understanding of complex environmental problems and innovation of solutions. More recently, we have developed a mobile tablet application to support compromise seeking. Participants used the tablet to individually prioritize the results by what they considered more important (e.g., damage costs, extent of flooding, downstream flooding), and used them to collectively generate different green infrastructure designs that made progress towards the participants’ diverse goals. This finding emphasizes the need to support group goal deliberation, empathy and negotiation, beyond enhanced cognition.

References

Abstract Index #: 19
FORECASTING SUSTAINABLE URBAN WATER USE AND GIS MODELING APPLICATION: A CASE STUDY OF METRO ATLANTA, GA
Abstract System ID#: 1051
Individual Paper
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Although individual water use levels (or gallon per capita use) in US have been gradually declined for last decades, increase of population, urbanization, sprawl, and decay of existing conventional infrastructure continuously raise water issues in urban areas. In general, water use is closely tied to land use types and physical characteristics of built environment; however, still few studies have suggested practical water forecasting models that integrates land-use change/urban growth policies with future urban water use demand.

In this study, we discuss sustainable water use framework including water use determinants and propose a GIS modeling application called 'Sustainable water use scenario-based decision support systems' (SWSPSS) which allows planners to test a series of water conservation and sustainable growth policies. We chose metro Atlanta, GA as our case study region in order to answer our main research question, ‘what are the impacts of alternative urban growth and water conservation scenarios on water use and how would they spatially vary in the future?’.
Development of SWSPSS involves in three major tasks; 1) development of the list of local/global representative coefficients of water use sectors, 2) development of sustainable water use scenarios and the modification of parameter values, and 3) construction of sub-models that simulates future urban growth and projects future sustainable water use. First, we identified indoor-outdoor representative water coefficients by land use from local water reports, literature, county water withdrawal data and local customer water billing records. These coefficients are used as default parameters for base case scenario in SWSPSS. In next, multiple sustainable scenarios are developed in terms of both urban growth policies and technological conservation strategies for indoor use, outdoor use, and rainwater harvesting. The input parameters each scenario are modified accordingly. Especially, we developed a regression model to estimate a size of regional roofing area for rainwater harvesting and estimated the water savings in alternative sustainable development scenarios. The last step involves in developing the modules and the sub-models that simulate urban growth and water use projections under the given scenarios. For this study case, we simulated the future land use changes and water use patterns based on exogenous population and employment information produced by the Atlanta Regional Commission up to 2035. The models are constructed as either python script tools or models in ArcGIS ModelBuilder environment.

In sum, this research offers the methodological framework to integrate water conservation strategies with growth scenarios for sustainable urban water management. The SWSPSS application enabled users to estimate the amount of water demand for every 5-year period projection and generated the map data showing spatial patterns of future water demand. Because it provides spatial layers of land use and water use patterns, planners can easily identify the range of future water consumption and high priority areas for additional infrastructure provision, if necessary.

References

MEASURING URBAN SYSTEM COMPLEXITY FROM A LAND-USE CHANGE MODELING PERSPECTIVE
Abstract System ID#: 1081
Individual Paper

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Unraveling the complexity of cities has been a growing topic of interest in planning (Batty, 2012). Researchers are currently borrowing measurement and other tools from natural sciences (Gao et al., 2006), physics, and information sciences (Li & Liu, 2006), in order to better understand urban systems complexities. These borrowed tools however, may have limited usefulness within the planning discipline. For example, these tools have been too theoretical, typically are not able to differentiate between different spatial regions, and generally provide little if any, guidance for planning practice. In this paper, we propose a planning-centric approach for analyzing urban system complexity. Our hope is to improve the connection between complex urban systems understanding and planning practice.

Our approach is based on statistical learning theory (SLT). SLT generally deals with the problem of finding a predictive function based on static time series data. In SLT, a higher degree-of-freedom (increasing the number
of independent parameters that can specify the system) will most often result in a better goodness-of-fit. Higher degrees of freedom can be realized through adding more explanatory variables to the model or assigning non-linear formulas to model variables. The same theory however, states that overly high degrees-of-freedom (referred to as over fitting) may improve fit, but may not necessarily improve predictive power (Hastie & Friedman, 2009). The relevant question becomes how many variables are needed to provide adequate fit and strong predictive power? This is especially important for urban growth models that are commonly used to assess potential future system states. If we can find an optimum predictive variable set, we can simplify model parameters, reduce uncertainty, and improve our understanding of future system behavior thereby improving our understanding of system complexity.

The optimal degree-of-freedom (the appropriate number of drivers and complexity of variable formulas for the strongest predictive power) in LUC simulation exists uniquely for every spatial region. In this paper, we describe an approach to calculating this optimum in the Chicago metro region using an application of the Land-use Evolution and impact Assessment Model (LEAM). We use 2 periods of National Land Cover Database (NLCD) land-use data (2001 and 2006) for McHenry County, IL as training data. We use a regression based, generalized linear model (GLM), variable selection methods, and sensitivity analysis to test combinations of drivers that best fit model results to training data (2011 NLCD data). This approach will help single out variable driver combinations that best predict known 2011 outcomes.

Our study contributes to the field of planning in 2 important ways. First, it will enable faster and more efficient calibration and sensitivity analysis processes for current urban LUC models. Our urban complexity measurement technique will also produce useful information on variable sensitivity and on LUC pattern interpretation. Because our complexity measure is tailored to a specific spatial region, it provides useful insights that can help guide planning practice in that region.

References

Abstract Index #: 21
URBAN ENERGY MODELING IN THE INTEGRATED URBAN METABOLISM ANALYSIS TOOL (IUMAT)
Abstract System ID#: 1104
Individual Paper

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Integrated Urban Metabolism Analysis Tool (IUMAT) is a holistic system-based tool for sustainability analysis of urban neighborhoods. IUMAT’s model for EWM (energy, water and materials) takes a bottom-up approach to generate spatial resources demand profiles based on buildings and neighborhood characteristics. This paper presents the correlations found by the EWM model between socio-economic indicators and energy consumption profiles. For statistical inference, we work with end use consumption surveys provided by U.S. Energy Information Administration (EIA) that are Commercial Building Energy Consumption Survey (CBECS), Residential Energy Consumption (RECS), Manufacturing Energy Consumption (MECS), and Transportation (RTECS). We analyze the energy data for different unit types classified within the North American Industry Classification System (NAICS) with regards to demographic, behavioral and attitudinal parameters. Based upon the results,
using ANOVA technique we elaborate on the factors that need to be included in a robust and reliable large-scale energy simulation. Systematic errors, along with other contributors to uncertainty will also be discussed.

References


Abstract Index #: 22

WHO'S VIEW: OPERATIONALIZING THE PRODUCTION OF MARGINALIZED SPACES

As the nation increases neoliberal policies to deinstitutionalize people with disabilities (PWD) as a cost saving measure to State Medicaid programs, little is known about the complexity of their experience after selecting and living in communities that are affordable and accessible to them in geographies of uneven development. PWD have been limited in their access to material goods, social equality, and the built environment by the dominant society. For some able-bodied individuals, the ability to access space is an afterthought, but for some PWD, the built environment can be exclusionary and/or tedious in the search for alternative routes attempting to access and reach their destination. The denial to access and produce space is systematically ingrained in society because it was not originally built for PWD, but for able-bodied individuals, and as a result, it perpetuates accessibility issues within the built environment and the social practice of everyday life over time. If attributing disability to the environment, it becomes necessary to understand what it is about an environment that makes it disabling and why it is disabling for some individuals but not for others.

Building on previous research that sought to better understand the search for affordable and accessible housing as part of the deinstitutionalization process and the amenity preferences in the community selected, this paper presents findings from a National Science Foundation dissertation improvement study of how PWD produce disability space in socially produced capitalist neighborhoods while discussing the operationalization of a multi-method approach of "grounded critical visualization" (GCV).

GCV applies analytical approaches from three methods of qualitative inquiry [root modes]: ethnography, phenomenology, and constructed grounded theory, which are integrated with extrapolations of photovoice to understand and also “voice” the participants’ experience [agency] through the visual. It also applies spatial analysis through critical GIS spatial and exploratory spatial data analysis/spatial regressions. For example, through a reiterative process, GIS mapping of census and parcel level land data was joined with ethnographic field research data including participant observation, interviews, field inspections, digital photography for photo elicitation, and survey questionnaires to ascertain how people with disabilities (both individually and as a collective) experience space, define their communities, navigate barriers, and use resources in their production of space. The initial data collected by approximately 35 people with disabilities living in several Chicagoland communities and the analysis represented through data visualization were introduced through ten focus groups and interviews to ascertain views of approximately 38 planners, developers, and policy makers and compare them with the views of people with disabilities.
GCV's methodological framework is also situated in the work of Lefebvre's social production of space - consisting of spatial practice (lived experiences), representations of space (conceptualized space), and representational space (perception of the lived space) - and other scholars undertaking his approach in the various disciplines of culture, geography, urbanism, planning practice, and archival research. These studies incorporated the spatial triad, but this research critically shifts the frame of analysis toward the interpretation of the production of space by developing the spatial triad as an analytical tool to understand how social spaces of disability are produced by people with mobile and physical disabilities. Lastly, the implications for future scholars in applying grounded critical visualization in other contextual factors in community and neighborhood planning are also introduced.

References

PARTICIPATORY ASSET MAPPING: A DIGITAL PLATFORM FOR THE INTEGRATION OF CULTURAL VALUES AND ASSETS IN PLANNING AND DEVELOPMENT FRAMEWORKS

For many post-industrial cities reinventing themselves in the 21st century, revitalization rests on culture and sustainable development as central tenets. In re-making urban places, this means not only restoring the economic opportunity cities once provided, but also creating urban environments that add to the well-being of residents and to the natural systems with which they are connected regionally. In this context, culture can be defined as an evolving continuum of spatially-rooted values and knowledge systems, and the material and immaterial expressions that emerge from these systems. Cultural assets embody or yield economic value, but also aesthetic, historical, social, spiritual and symbolic values. The stock of assets comprises historic buildings and streetscapes as well as traditions, celebrations, music, literature, spaces, institutions and key actors in a community through which we express our shared beliefs, customs, rituals and values. The flow of goods and services produced from cultural capital provides a wide range of benefits for people, as individuals and as members of the community. The introduction of a cultural context into the public planning framework makes it possible to employ a balanced process of articulating visions and pathways for improved inclusion, security, quality of life, and economic development based on local characteristics and resources. Although capitalizing on the broad range of values derived from cultural assets through tourism and creative industries is gaining interest in urban renewal strategies, initiatives are usually uncoordinated, poorly funded and not integrated into wider agendas, and as a result, they fail to deliver the full benefits that could be realized. In order to make effective use of cultural resources in planning and development at all levels, standard methods are needed to collect, coordinate, and make this information available to planners, decision-makers and other entities engaged in the city's development. This paper describes advancements and results of a research project designed to develop an operational framework for the integration of cultural and sustainable development planning. It involves the development of a digital platform with a participatory component for the mapping of cultural values and assets from the outset. This framework was deployed in Holyoke, MA, a city of varied neighborhoods, layered cultures, strong communities, and extraordinary industrial heritage landscapes. The paper presents the baseline information built upon extensive documentary research and interviews within key actors and agencies, as well as the infrastructure created for data collection and dissemination. Integrating unique cultural assets and
assessment tools, this platform provides actionable information for the city’s economic development strategy as well as for entrepreneurs, non-profit organizations and community members. As such, it creates the ability for collaboration using site-level information and place-based cultural data, alongside traditional statistical and technical information commonly deployed in planning and policy-making.

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Abstract Index #: 24
MAPPING PATHWAYS BETWEEN URBAN ENVIRONMENTAL INFORMATION, KNOWLEDGE AND ACTION
Abstract System ID#: 1265
Individual Paper
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This paper will present a comprehensive review of a diffuse set of literatures with respect to how information is used directly to affect the behavior of urban citizens with respect to particular planning issues. The focus will be on the limited case of environmental data and information, though this will probably be relevant to other areas as well.

This paper examines a wide range of literature from psychology, environmental policymaking, and behavioral economics in order to examine three fundamental planning questions: (1) by what pathways do urban citizens access and use information?; (2) to what extent planning or other disciplines are needed to interpret information about cities?; and (3) what are new opportunities to affect these pathways to achieve planning goals?

Planners have been using computers to analyze and model cities for almost as long as these technologies have been available. The role and effectiveness of planning support systems and urban models has also been long debated and continues to evolve. Many critiques of the rational planning model also challenge the notion of planners as value-free or disinterested information providers.

However, there has been an explosion in the amount of information available about urban life due to two ongoing trends: the growing and pervasive nature of computing and the Internet in everyday life, as well growing urbanization and concentration of wealth and technology in dense urban environments. This digital information comes from many sources, including the move of many social and economic activities to the Internet; open and administrative data movements; sensor data, including visual data that can be increasingly be recognized and analyzed; social networks; and “data exhaust”, i.e. data generated from interactions within digital environments. Much of this information about cities is gathered, processed, and provided by sources other than planners.

Therefore, as an alternative approach to the idea of planning support systems, this paper maps the flow of information about urban environments by first starting with diagrams that begin with the information of interest, and then how this information is transferred or flows to urban citizens. This paper then goes on to examine the much more diffuse literature on individual understanding and decision-making with respect to environmental issues. This includes an examination of how such information affects both short-term reactions and longer-term reasoned actions through the work of Daniel Kahneman, and how information tools can be used directly to affect urban environmental policymaking, through the work of Cass Sunstein.
References


Abstract Index #: 25
MORE THAN DATA: WORKING WITH BIG DATA FOR CIVICS
Abstract System ID#: 1368
Individual Paper

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It is hard to miss the idea that “Big Data” can reshape the way we live. From the analysis of medical records to the study of traffic flows, popular media and advertising have been touting data as the solution to all of our problems. Whether this is a vision of the future or a condition of the present, putting data to work to answer questions is not new. In fact working with data is probably as old as the map itself, which dates to earliest recorded history. Our relationship with data has shifted over time, often marked by innovations in technology, such as the printing press, computers, and now mobile devices and ubiquitous sensors. Popular interest in data waxes and wanes as our attitudes toward using rational evidence moves in and out of fashion. We have just entered a period of renewed excitement for using data to reshape the way we live because of the unprecedented amount of information we currently collect and store. For data enthusiasts the possibilities are exciting, however our recent infatuation with data may need some guidance. Data does not perform simply because it exists, it is how we put data to work that makes it relevant.

Data has the ability to simultaneously elevate some and marginalize others. The Homeowner’s Loan Insurance maps, now famous for excluding minorities from housing loans are a great example of this duality. Data does a great job at creating evidence, but can be easily be misunderstood or misappropriated creating consequences that have lasting effects. This does not mean we should avoid data, but it does mean we must understand it is a tool that can be manipulated - sometimes unknowingly. We all manipulate data to create evidence for our interests. This is because when we work with data we make choices about what to show, collect, and analyze, and those choices are constructed by our own view of the world.

Although data has a storied past, data can be used for civic action and policy change by communicating with it clearly and responsibly to expose hidden patterns and ideologies to audiences inside and outside the policy arena. Communicating with data in this way requires the ability to ask the right questions, find or collect the appropriate data, analyze and interpret that data, and finally visualize the results in a way that can be understood by broad audiences. Combining these methods transforms data from a simple point on a map to a narrative that has meaning. Data is not often processed in this way, largely because data analysts are not familiar with the techniques that can be used to tell stories with data. This article details examples where data has been operationalized to expose issues and generate policy debates.

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Track 2: Economic Development

Abstract Index #: 26

CLUSTER AND INNOVATION: THE SELECTION MECHANISM OR THE LEARNING MECHANISM?

Abstract System ID#: 17

Individual Paper

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Studies to date in general identify that clusters increase the local firms’ average innovation performances (Baptista, 2001). However, the mechanism underlying the process is unclear. Two major mechanisms could be at work. 1) The selection mechanism. The intensive competition in clusters selects relatively well-performed firms by bankrupting or excavating the ill-performed ones, or prevent them from moving in (Grillitsch and Rekers, 2014). Since only the relatively well-performed firms stay, the average performance is improved. 2) The learning mechanism. Clusters provide infrastructure, facilitate communication, create knowledge spillovers and the competition in clusters motive firms to learn more and faster (Jacobs, 1986; Porter, 1998). As a result, every in-cluster firms’ innovativeness improves (although not necessarily equally). Since every firm improves its performance, the average performance is improved. Previous studies, focusing on estimating clusters’ effects on average innovation performance, cannot differentiate the two mechanisms, because they both increase the average performance.

This paper attempts to differentiate between the two potential mechanisms, by focusing on estimating the distributions instead of the means. This paper answers the following questions. 1) Which mechanism works in high-technology clusters in the U.S.? 2) If only selection is at work, then what inhibits the learning mechanism? What kind of firms are selected to stay in the clusters? 3) If only learning is at work, then what stops other firms from moving into the clusters and enjoy the benefit? Who benefits more from the learning mechanism, the relatively ill-performed firms or the well-performed ones, the small or the large firms, etc.? 4) If both mechanisms are at work, what are their shares of contribution to improving the average innovation performances? Are the two mechanisms independent, substitutes or complements to each other? How and why do their shares of contribution change over cluster life cycles and across regions?

This paper uses the U.S. patent data and firm address data from the U.S. Patent office, and the firm re-location data from NETS. This paper estimates and compares the distributions of firms’ innovation performances in clustering regions and in non-clustering regions using the negative binomial model and non-parametric methods. A survival model is applied to re-locating firms, exploring the determinants of the selection mechanism. A quantile regression model is applied to in-cluster firms, exploring the determinants of the learning mechanism. Some interviews with a few firm managers are done to further support the quantitative results and to uncover sub-mechanisms (e.g., Do firms learn by observing and imitating other firms’ innovation results? Or do they learn from direct information exchange?).

By differentiating the two mechanisms, different recommendations can be made to the local authorities and to the firms. The local authorities, who care about improving the local’s innovation performances, typically would like to maximize the total effects of the two mechanisms. The firms, who care about improving their own innovation performances, typically seek to maximize the effect of the learning mechanism. Since this paper measures the two mechanisms and explores their determinants separately, it provides useful guidance for the local authorities and firms about how to better achieve their goals.
This paper explores the creative cities movement, focusing on who is left out of this primarily urban trend. What is the shadow side of the tremendously optimistic creative cities movement? How did this trend become globalized so quickly? The gentrification of derelict districts in the service of creating renovation and building up anchor institutions may produce a group of alienated and angry current and former residents. If these projects are supported in any way by the municipality, state actors working need to justify policies created and implemented that may impact the marginalized and less fortunate community members. The challenges of fostering inclusive urban interventions extend to issues of place, as many creative cities interventions are located in parts of the city inaccessible to the very communities being touted as a part of this multicultural framework. Attention must be paid to building design, statuary, public art, and municipal branding to ensure that a philosophy of cultural inclusion truly is embedded in all of these aspects of creative placemaking. While the idea of cultural and ethnic festivals, arts facilities, and live work spaces for artists are appealing, do these really contribute to the vibrancy of neighborhoods and districts? What about class issues in the creative city discourse?

This article first describes the winners and losers in the creative cities context, then examines root causes of this win/lose dichotomy that often results from creative placemaking, even as it is introduced to provide a ‘solution’ in urban areas with crumbling city centers. I investigate which groups are marginalized, including those with lower socioeconomic status, artists outside of the predominant norm, gays and lesbians, and those attempting creative placemaking in smaller cities. While municipal actors concern themselves with issues including livability in order to make their cities more attractive, implementing the tool of arts and culture may leave numerous residents and marginalized groups out of this conversation altogether.

The creative cities movement has traveled fast, and policies that cultivate these initiatives have been adopted in numerous urban areas. In the late 1990s and early 2000s, many cities turned to creative placemaking in efforts to incorporate tools to revitalize their urban cores, many times where the poorest and most marginalized residents resided. Downtown development and renovation often served to reimagine and rebuild these decrepit areas, and issues such as economic disparity and racial inequality often were left out of these efforts at transformation.

Branding a city through creative placemaking incorporates the issues of livability, urban planning, economic development and employment opportunities. Among these multifaceted concerns, the creative city discourse has begun to reexamine the underlying frameworks that stem from the use of arts and culture to draw in new residents, businesses and tourists. Economic development actors in cities throughout the world have found that fostering creative cities interventions has contributed to their goals and ensured the success of their cities. Cities want to grow, and many municipal stakeholders feel that if they foster an environment in which creativity can occur, this will lead to further growth and development. This vision of an expanded role for culture and creativity in cities now needs to re-examine the underlying assumptions that may lead to the detriment of this movement. I discuss how the global creative cities phenomenon migrated so quickly and look at why some groups have been favored. I present considerations for an agenda that calls for increased inclusiveness, and conclude with models...
for closing the winner/loser gap and a discussion of the remaining disconnects, as well as suggestions on ways to include previously marginalized communities in the creative placemaking conversation.

References

Abstract Index #: 28

THE DARK SIDE OF THE SERVICE/EXPERIENCE ECONOMIES: EXAMINING THE SPATIAL CONFIGURATION OF SEXUALLY ORIENTED MASSAGE PARLORS IN LOS ANGELES AND NEW YORK CITY

Abstract System ID#: 69
Individual Paper

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Background: Scholars have argued that contemporary economic growth is related to an expanding “experience economy”, where goods and services are not only exchanged, but in addition, they are “staged” for enhanced experiential value to the consumer (Pine and Gilmore 1998). Sex work has increasingly taken on such dimensions as it has moved from the streets into indoor venues, such as massage parlors; the growth of the sexually oriented massage parlor industry is traced to heightened enforcement of anti-prostitution ordinances (making street based sex work more difficult) and because of the internet (making customer searching of workers and parlors easier). Indoor sex work is now the predominant mode in the industry in the US (Sanders et al. 2009), and such firms predominantly employ immigrant female sex workers, especially Asians (Lever et al. 2005). Though there has been policy concern around sexually oriented massage parlors (Dank et al 2014) and an important literature on “red light districts” (e.g., Hubbard and Whowell 2008), scholars still have inadequate understanding of the industry’s current spatial configurations and the locales in urban environments where massage parlors operate.

Method: Using geocoded data from a masseuse rating website including businesses in Los Angeles County and New York City, we conducted spatial and regression analyses of sexually oriented massage parlor location to identify (1) spatial clustering; (2) differences between Los Angeles County and New York City; and (3) demographic and economic factors associated with clustering.

Conclusions: The results show that sexually oriented massage parlors cluster in particular Census tracts in distinct geographic enclaves. Clustering was positively associated with Census tracts with more employees and with higher proportions of adult males, Asian residents, unemployed persons, and households below the poverty line. Clustering was negatively associated with Census tracts with higher average family size and proportion of women. Furthermore, clustering patterns for LA County and NYC were significantly different. Alternative explanations for these patterns are discussed.

References
Abstract Index #: 29
BLOOM AND EQUALITY: EVALUATE THE ROLE OF THE ARTIST AND THE PLACE IN THE PROCESS OF ARTS DISTRICT ECONOMIC DEVELOPMENT
Abstract System ID#: 118
Individual Paper

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Arts districts play an important role in old district revitalization and urban economy promotion, and such, are places where creative commons and innovation can occur. But it also form a typical development path model that artists cluster will become more and more commercial after several years, then follow with the leaving of artists and lost of creative power. What would happened after that? Does its economy decline or keep a sustainable boom? Some literatures argue that artists and other creative people are the core to push and keep clusters’ thrive. Their leaving leads to debase the real creative and high value-added portion. Others suggest that place which contains social, cultural and cultural industry network context will attractive investment to maintain its economy prosperity. Artist or Place, which have played or will play the key role for Arts District’s economy creation. Is the value distribution equal to artist who have to leave their cluster? Better knowledge of how artists and space change interact with cultural cluster’s economy development is particularly necessary, because over last decades, the different focus deeply affect policy target for Art District, even the other kind of creative cultural clusters. We attempt to address the dearth of artists and place efforts of clusters economy development by qualitatively and statistically testing the relationship of the artists, place, and its economy value at different stages. Base on the value increasing and distribution to analysis its bloom reason and equality status. We focus on a typical artist cluster — “TianZIFang” in China, with its economy Survey data and development process records to study how artists and place context are associated with a set of six dimensions indicative of local economy development.

The find suggests that, with multiple economy growing, the artists cluster has gradually developed to a core area of cultural industry which link the market and the creative point of its network. The original Information Nod Role of Artists has been replaced by Space. Although Artists no longer occupied dominant role in the cluster’s economy development for the future, the really driving force of the artist’s leave is the unfair distribution of value.

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Entrepreneurship is a critical driver of regional economic development (Carree and Thurik 2003). By capitalizing on knowledge created in large research universities or companies, entrepreneurs foster innovation and create jobs, which bolster the local economy. In addition, these innovative firms can contribute to specialized business clusters, which convey benefits to all of the firms in a local area by fostering increased competition and regional competitiveness (Malmberg and Maskell 2002).

Research at the regional level has begun to unravel some of the factors behind the uneven distribution of entrepreneurial activity (cites). Recent case study work has also revealed the role of large businesses as anchor institutions in fostering entrepreneurial activity in second-tier regions (Mayer 2011). Comparative work using establishment data has also analyzed new firm survival trends across urban, suburban, and rural areas (Renski 2008). Much work remains to understand geographic, temporal, and industrial variations in startup activities, particularly in a comparative context outside areas such as Silicon Valley and Route 128 in Boston (Saxenian 1996).

Given the need for additional comparative work on entrepreneurship trends, particularly at the intra-metropolitan level, this paper will use point-level resolution establishment data to analyze geographic, temporal, and industrial variation in new business activity within and between metropolitan areas. This analysis will answer the following research questions:

1. Are temporal trends in new business activity context (metropolitan area) -specific?
2. How have macro-level business cycles (particularly the dot-com bubble and the housing crisis) influenced temporal fluctuations in new business activity? Are the effects short or long-term in nature?
3. Are there industrial trends in startup activity across metropolitan areas?
4. Does startup activity cluster within metropolitan areas, and, if so, where?
5. Which areas have seen the most significant clustering of new businesses — has the ‘back to the city’ movement influenced patterns of startup locations?

An important aspect of this paper is that it compares several of the most highly-visible regional startup clusters, such as Silicon Valley and the Research Triangle in Raleigh-Durham, with other second-tier metros in order to better understand the relative importance of those regions’ unique advantages vs. national macro-economic trends. As planners nationwide take steps to foster locally grown businesses, which is an attractive alternative to expensive industrial recruitment economic development strategies, this study will provide important information about trends in new business activity within metropolitan areas. These trends are important for planners and economic developers to better understand the effects of the national economy on the localized development patterns of cities. It may also provide insight on how the urban structure of different regions influences entrepreneurship and the clustering of different kinds of businesses.

References


Abstract Index #: 31
A SURVIVABILITY ANALYSIS OF WOMEN’S HIGH TECH VENTURES
Abstract System ID#: 162
Pre-organized Session: Innovation, E’ship & Economic Development II

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The majority of women entrepreneurs start ventures in the service and retail industries (Brush, Carter, Gatewood, Greene, & Hart, 2004; Kelley, Brush, Greene, & Litovsky, 2013; Loscocco & Robinson, 1991; Smith, Smit, & Hoy, 1992). Although women are beginning to start technology-related ventures (Brush et al., 2004), the technology industry is male-dominated and women high tech entrepreneurs are spatially concentrated in Silicon Valley (Mayer, 2008). Previous research on women high tech entrepreneurs focus on spatial segmentation (Mayer, 2008), financial institutional support, (Brush et al., 2004), and comparisons to men high tech entrepreneurs (Robb & Coleman). Given the current literature on women high-tech firms, more research is needed to understand business survival and spatial variations in women-high tech firm survival rates. Research on high-tech firms, highlights that women gravitate towards specific types of businesses within the high-tech sector (Mayer, 2008). For example, women high-tech entrepreneurs gravitate towards software publishing, design services, management and consulting services, telecommunication, and research services within the high-tech sector (Mayer, 2008). Prior work on women’s high tech ventures finds that venture survival is related to prior work experience, external markets, and education (Boden & Nucci, 2000; Gatewood, Brush, Carter, Greene, & Hart, 2009). A high tech firm also has increased chances of survival in suburbs and small cities than urban cores and rural metro areas, though advanced services grow quickly in urban cores (Renski, 2008). Much more work remains to understand the women that pursue high-tech ventures, the types of ventures they create, and the regional factors that enhance the survivability of these ventures.

The purpose of this paper is to design a conceptual framework that outlines the factors that impact high-tech ventures started by women. It will also use information from the Kauffman Firm Survey to collect information about high-tech venture characteristics as well as firm-level and regional characteristics that impact their survivability. This analysis will answer the following questions:

1. What are the characteristics of women who create high-tech ventures?
2. In which high-tech sectors are women started ventures most and least common?
3. What is the survival time of women’s high-tech ventures and is their spatial variation in this survival period?

To the factors that impact the survival of women’s high-tech ventures, multi-level models that consider individual firm and regional characteristics will be constructed using two sources of data, the Kauffman Firm Survey (KFS) data and regional information from County Business Patterns, the U.S. Census Bureau, the Bureau of Economic Analysis, and the U.S. Department of Agriculture. High-technology ventures will be defined using the NAICS industry codes outlined in Mayer (2008) and Robb (2010).

These models will provide important information about the factors that impact the survivability of women’s high-tech ventures. This information is important for planners because economic development initiatives nationwide are increasingly emphasizing new ventures as a source of business diversity and job growth. The pace of technological change has also placed an emphasis on technology-oriented businesses, which means wider participation of women in starting these ventures is vital to regional competitiveness. In this respect, information
about regional factors that impact high-tech venture survivability will help economic development planners understand factors which can be emphasized to improve the business climate for women’s high-tech ventures.

References


Abstract Index #: 32

PLANT CLOSURE, ORGANIZATIONAL DEMISE AND COMMUNITY ENTREPRENEURSHIP

Abstract System ID#: 184

Pre-organized Session: Innovation, Entrepreneurship and Economic Development

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The closure of a major employer can have devastating impacts on a community. Lost paychecks wreak havoc on the lives of layoff victims, producing serious public policy consequences that are emblemed by boarded-up factories and crowded unemployment offices. Communities often find themselves often straddled between shrinking tax revenues and increased demand for services. These issues have been extremely prevalent in recent years. Since 2003, more than 5,000 manufacturing facilities across the US have been shuttered (www.plantclosingnews.com; site accessed 1/16/2014), and bankruptcy declarations have increased dramatically in recent years. However, some scholars point to potentially constructive outcomes of organizational demise. When organizations close, new entrepreneurial ventures rise up in its wake. For example, the closure of Maytag in Newton, Iowa in 2006 has spurred on a new generation of entrepreneurial ventures by former employees and community members.

This study seeks to better understand community entrepreneurial responses, by documenting changes in the level and composition of new firm creation following a large plant closure. Do we see an increase in new firm creation in similar and related industries following the closure of a major employer? Scholars have argued that the effects of organizational decline on innovation may be positive or negative depending on certain environmental, organizational, and individual-level variables (Mone, McKinley, & Barker, 1998). Thus, we expect to find considerable spatial heterogeneity in the degree of entrepreneurial response. We seek to explain this place variability—asking why some communities exhibit more resilience in the face of organizational demise through entrepreneurial activity than others?

Our approach is mainly quantitative and longitudinal. We focus on rural and small urban counties that fall outside of major metropolitan economies. These are likely to be more sensitive to the impacts of discrete plant closures. We track each over time, compiling information on plant closures, new firm starts, industry composition, and other community characteristics from a variety of secondary data sources. We estimate a quasi-experimental / interrupted time-series model to isolate the impact of large plant closures on new firm formation from other competing causes. We then estimate a panel regression model to isolate the contributions of individual variables on the degree of community entrepreneurial response.
Agglomeration economies, a form of externalities and scale economies, have been well known as one of fundamental explanations of industrial location (Marshall, 1920; Henderson, 1974; Jacobs, 1969; Krugman, 1991). Urbanization economy is one of agglomeration economies influencing foreign direct investment (FDI) location, which is related to a city size (Jacobs, 1969; Henderson, 1974). The identification and examination of microfoundations of agglomeration can help understand the process and mechanisms behind the behavior of FDI location. With China’s rapid urbanization, urbanization agglomeration effects are playing increasingly significant roles in foreign direct investment (FDI) location. China’s rapid urbanization has been considered as an important force shaping the world development in the twenty-first century, but the impact of urbanization economies on FDI has not been thoroughly identified in the context of Chinese urbanization, especially in the 2000s. Further, existing studies on FDI location in the context of Chinese urbanization fail to distinguish urbanization agglomeration effects stemming from different urbanization processes: the increase of urban-hukou population and the migration.

This paper employs two sets of population data from two systems for the collection and reporting of statistical data, China City Statistical Yearbooks generated from the hukou registration statistics and China Censuses including migrant workers, to distinguish urbanization agglomeration effects resulting from two different urbanization processes. The results indicate that the urbanization agglomeration stemming from two different urbanization processes had opposite effects on FDI location: the urbanization agglomeration economies resulting from the increase of the urban-hukou population and the urbanization agglomeration diseconomies resulting from the migration. The findings provide policy implications on developing periphery cities to motivate and encourage migrant workers to move from core cities within the economic zones and provincial capitals, especially cities in the eastern/coastal regions, to the periphery cities.

References

FROM RESOURCE MUNIFICENCE TO LOCAL ENTREPRENEURSHIP ECOSYSTEM

Government sponsorship has become a popular policy tool in the last fifteen years, and has been implemented by virtually every state government and a number of city governments (OECD, 2013). The rationale for such action is to create resource munificence whereas resource-scarce small or new firms could allocate their capital to their core competency. Incubators and public venture funds are the most typical of this approach.

Despite the popularity, the past academic studies have given mixed results for the evaluation of government sponsorship. For instance, Amezcua et al. (2013) observed that the general effect of incubators was marginal, as incubated firms survived better, but died more quickly after they graduated. However, additional services
provided by incubators, such as networking efforts, could improve the effect, and it also depended on the condition of the market environment and firm density. Among all studies, Lerner (2009) has been most pessimistic, by concluding that the selection process of public venture funds was so politicized that the public or semi-public sector could not choose firms based on the potential from the economic and market-based perspective.

We identify the major limitation of the past studies because their analysis overwhelmingly relied on the firm-level performance data, most notably the firm survival rate, and at best the employment and revenue growth rate. Such analysis treated the effects of government sponsorship in isolation and neglected the complex mechanism that government sponsorship can engage within the context of social and economic relations surrounding the sponsored firms. This becomes particularly a problem when the objectives of the public sector are not only to increase the micro-level survival or growth rate of supported firms, but also to enhance the macro-level entrepreneurial environment of the region. We all know that firms, particularly startup firms, do not survive and grow in isolation, but cohabitate with various entrepreneurship supporters, such as research universities, venture capitals, non-profit support services and for-profit professional services, the highly skilled workforce, and even broader social capital (Feldman, 2001; Neck et al. 2004).

We conduct a case study in St. Louis in which the coalition of the public, non-profit, and private actors established the Arch Grants which provides $50,000 to 20 winners of their annual startup competition. Here, the resource munificence is minimal, particularly considering the team-oriented nature of startup firms. Based on interviews of 35 recipient firms and 10 support organizations, we first demonstrate that the government sponsorship can create a cohort of entrepreneurs where they can learn from each other about businesses, mentors, resources, and other networks. Second, the government sponsorship can facilitate to integrate local entrepreneurship support resources. In our case, the recipient companies were located at the semi-incubator facility where a local non-profit organization purchased an unused retail space. Furthermore, other support organizations, accelerators, and venture capitals co-located, helped to create the interaction among those support organizations and local startup firms, and streamlined the development of startup firms at various stages of entrepreneurship. Thus, we conclude that the government sponsorship can play a role to integrate various actors involving the local entrepreneurship, and its evaluation should go beyond the traditional firm-level performance measurement.

References
Gentrification is a term often associated with displacement and other negative byproducts of affluent in-movers altering the economic and demographic composition of a neighborhood. Empirical research on neighborhood change, however, has produced no conclusive evidence that incumbent residents are in fact displaced under circumstances of gentrification. The question is then, do these incumbent residents benefit from the economic and social changes that accompany gentrification? In this paper, we focus on low-income neighborhoods undergoing economic transitions (i.e. gentrification) and test whether or not the potential benefits from these changes stay within the community, in the form of employment opportunities for local residents.

The impact on employment opportunities for local residents is ambiguous. In the case where economic change brings in new and/or more local businesses, nearby existing residents will have the benefit of more information and lower search costs. All else equal, they should see more local employment opportunities—essentially a reversal of the spatial mismatch phenomenon. On the other hand, should neighborhood economic upgrading bring in new retailers that more productively use the existing commercial space or who exploit farther-reaching hiring networks (chains, for example), local existing residents, with potentially lower skill sets and smaller networks, will not be as competitively positioned for these jobs.

In order to test these predictions, we build a dataset that tracks the universe of neighborhoods in New York City for nearly a decade (2002-2011) with information on business turnover and contraction/expansion over time, demographic, economic, fiscal and built environment characteristics, and employment and demographics of the local resident labor pool. We compare changes in local employment across low-income neighborhoods experiencing gentrification and those that are more stagnant or economically declining.

Our preliminary results suggest that gentrifying neighborhoods on average do not experience consistent, meaningful gains in local employment, compared to other comparable low-income neighborhoods that are not undergoing economic upgrading. There is some weak evidence that, as a share of all jobs in the census tract, the number of local jobs decreases under circumstances of gentrification. At larger geographies (i.e. ZIP codes), however, the number of jobs going to local residents increases, and these jobs are primarily going to low-earners. Stratified models indicate that any local job gains are concentrated in neighborhoods with initially longer commute times for their workers (for both tract and ZIP analyses) and in tract neighborhoods with higher unemployment rates; both of these findings suggest that gentrification is perhaps helping to fill an initial employment gap. Analyses at larger ZIP geographies, however, show that neighborhoods with higher initial unemployment rates witness drops in the number of local jobs; these results could be obscuring variation at finer geographies, though. These preliminary findings are encouraging in that any change in local economic conditions could be a remedy for employment mismatches. The lack of consistent positive effects, however, raises concerns that incumbent lower-income residents are not reaping enough benefits from changing economic circumstances.

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The long-term dominance of suburban areas may be coming to an end. Economic development in the decades ahead may be spawned in urban areas and especially in vibrant centers - live, work, play environments. This analysis tracks the location of privately held firms experiencing very high growth in recent years. The follow the spatial distribution of employment within metro areas but are concentrated more heavily in vibrant centers.

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Abstract Index #: 900
INNOVATION DISTRICTS: ECONOMIC DEVELOPMENT INNOVATION OR SHINY NEW BOTTLE?
Abstract System ID#: 345
Pre-organized Session: Innovation, Entrepreneurship and Economic Development

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Innovation districts are fast gaining attention as a new strategy in urban economic development, perhaps becoming an incipient fad. They have been promoted energetically by the Brookings Institution’s Bruce Katz among others (Katz and Bradley 2013; Katz 2014) and buoyed by the ostensible successes of early adopters Barcelona and Boston. As additional cities in the United States and worldwide move to establish and promote innovation districts, it is important to consider whether they represent a potentially effective and valuable approach in economic development.

What are the distinguishing features or characteristics of innovation districts? Do innovation districts present a substantive advancement in economic development policy, or are they more appropriately interpreted as efforts to recombine or advertise conventional policies under a more contemporary rubric? Must they be planned or can innovation districts arise without intentional public action? How can we evaluate their promise regarding the aims of fostering innovation, entrepreneurship, and economic dynamism?

Because nearly all existing innovation districts are immature, it is not yet feasible to conduct rigorous empirical analyses of their performance. Therefore, we address the questions raised around innovation districts by concentrating on three tasks. (1) We establish and justify a precise definition of innovation districts and identify their characteristic features, with reference to existing and proposed examples in the United States and elsewhere (Barnett et al. 2014). Given the current ambiguity of the term in practice, this is a crucial step for understanding the strategy and being able to assess its originality. (2) We evaluate the merit of innovation districts with respect to theories and current understandings of the spatial aspects of innovation and entrepreneurship (e.g., Shearmur and Bonnet 2011; Audretsch and Pena-Legazkue 2012). To what extent does the design of innovation districts correspond with conceptions of productive regional innovation processes? (Cooke 2002) (3) We present and preliminarily defend our judgment as to whether innovation districts are likely to be effective in advancing regional economic development goals.

References
Green economy and green jobs are important components for sustainable economic development. Recent studies address the definition of green jobs and identify their economic impact (Chapple et al, 2011; Yi, 2013). In addition, policy makers increasingly seek to encourage the creation of green jobs for sustainable economic development. However, very few studies attempt to examine spatial patterns of green jobs, in particular, in the metropolitan areas. According to the Bureau of Labor Statistics at the U.S. Department of Labor, green jobs are defined as “jobs in businesses that produce goods or provide service that benefit the environment or conserve natural resources.” Although this definition is intended to address the output of the green jobs, it does not consider their locational factors that may affect the environment.

Using a longitudinal firm-level data from the National Establishment Time-Series (NETS) dataset 1990-2010, we examine the spatial patterns of green jobs and their dynamic changes over time within the Atlanta metropolitan area. Specifically, we examine whether green jobs slow greenfield consumption, reuse previously developed properties and vacant land, and promote job-housing proximity. The Atlanta Regional Commission’s LandPro Database allow us to explore whether the green jobs tend to locate in greenfield sites in rural areas or otherwise undeveloped land at the outskirts of the metropolitan area, or to choose brownfield sites or industrial and office property reuse sites within urban core areas.

The expected results demonstrate whether green jobs are located in green locations in a metropolitan area. We discuss spatial characteristics of green job locations and suggest policy implications for green industries.

References

ARE AMERICA’S INNER CITIES COMPETITIVE? EVIDENCE FROM THE 2000S

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In the years since Michael Porter’s seminal paper about the potential competitiveness of inner cities, two narratives have emerged about the overall pattern of urban economic development. The first, which we call the “comeback cities” narrative, states that the decades of the 1990s and 2000s were a renaissance for cities as flows of population, jobs and investment shifted back from suburbs and exurbs to urban areas, particularly downtowns (Grogan & Proscio, 2000; Sohmer & Lang, 2001). The second narrative that has taken shape is that of uneven geography of growth in the last few decades. Morretti’s New Geography of Jobs (2012) and the literature on high-technology regions argues that contemporary US economic development has taken on a distinctly uneven pattern that leads to a polarization between so-called “innovative” regions and “backward” regions, which in turn drives inequality and a divergence in outcomes across metropolitan areas (Morretti, 2012; Pastor, Lester, & Scoggins, 2009; Saxenian, 1994). The implication of this second narrative is that the type of inner-city renaissance described in the first narrative will only occur in growing, innovative regional economies. However, is this necessarily the case? Can inner-city economic growth occur in down-market regions? Is the type of consumption-based growth that is fueled by gentrification in growing regions like New York or the Bay-area, the only mechanism to bring jobs back to urban neighborhoods? In this paper, we explore these intertwined narratives by describing the pattern of neighborhood based employment changes at a national scale. We document the trends in net employment growth and find that inner cities gained over 1.8 million jobs between 2002 and 2011 at a rate comparable to suburban areas. We also find a significant number of regions have inner cities that are competitive over this period—increasing their share of metropolitan employment in 120 out of 281 MSAs. We also explore the determinants of job growth within the inner city, finding that tracts that grew faster tended to be closer to downtown, with access to transit, and adjacent to areas with higher population growth. However, tracts with higher poverty rates experienced less job growth, indicating that barriers still exist in the inner city.

References
Since the collapse of the housing market in 2008 select cities throughout the United States have seen a return of real estate prices to 2007 levels. If the lenders and investors who lost money in the crash are adopting a new, more cautious approach to investment, and the issuance rate of commercial mortgage-backed securities is only at 2003 levels, then how do we explain this phenomenon? Taking a modified institutional approach (Ball, 2006; Pryke, 1994; Henneberry and Rowley, 2002), this paper uses an analysis of investment patterns in Boston and San Diego, along with interviews with investors and developers, to gain insight into these recent growth spurts. Particular importance is put on sources of capital, the relationships between different institutional actors in the development process, and the tendency of particular sources of capital to follow particular logics of investment and risk assumption. It is argued that a better understanding of the patterns of investment and the rationale behind them will aid planners in their dealings with developers on a day-to-day basis.

The paper is grounded in the literature on financialization—the increased importance of the financial sector and financial instruments in the economy—and the ways it has been remaking real estate development and investment (Ashton, 2009), particularly through a set of investment vehicles including Real Estate Investment Trusts, sovereign equity, and hedge funds, which have made it easier for non-experts to invest in real estate (Downs, 2010). Other than Downs’ work, most of the literature on this topic has been tied to the residential rather than the commercial (non-single family development) sector of the real estate industry. This paper takes up the question of how these financial options are reshaping commercial development, examining their role in the Boston area’s recent rapid growth, as well as in San Diego, where, by contrast, growth measured by both sales and price increases has been slower.

The findings are drawn from transaction records in both cities and interviews with market participants there. They point to a changing set of investment agents (both people and tools) at work in real estate markets. Insights from investors and the trade literature help explicate how the nexus of financial instruments, investors, and institutions, as well as developers is producing both the rapid increase in pricing and the investment patterns in the data.

For planners it is crucial to know the mechanisms that drive real estate development in different contexts, and to learn to ask questions to determine if a project is likely a speculative investment. The risk associated with the choice of investor can be as important as the choice of soil on which to build. The investors should be considered, for instance, when the possibility of economic development subsidies comes into play. Moreover, it has long been too easy for city officials to look to construction as a principle engine of economic growth. A clearer understanding of how real estate developers and investors work should help planners be somewhat more sanguine when approached with new projects for their community.

References

Abstract Index #: 40
WINNING THE GAMES: BEST PRACTICES FOR SECURING COMMUNITY BENEFITS FROM MAJOR SPORTING EVENTS
Abstract System ID#: 598
Individual Paper
A growing body of academic literature indicates that major sporting events fail to yield social and economic gains for host cities. Worse, anecdotal accounts suggest the events may do more harm than good. As a result, potential hosts have increasingly refrained from submitting bids. Yet post-event experiences are not universally negative; Los Angeles, Atlanta and other Olympic cities worldwide have leveraged new facilities and image enhancement to create sustained benefits.

Achieving success involves a blend of active stakeholder involvement, smart public policy and thoughtful urban design. With due care to these issues, host cities can minimize gentrification, finance economically and environmentally sustainable facilities, and reap the benefits of global media exposure.

But how? This study assumes an evidence-based lens to report on the experience of seven recent or future Olympic cities: Los Angeles, Atlanta, Rio de Janeiro, London, Athens, Beijing and Sydney. Our analysis is based on stakeholder interviews, qualitative and quantitative assessments of financing arrangements, observation of stadia design elements, and data on post-game facilities utilization. Our findings represent a series of “best practices” that, if followed, benefit the host and event organizers alike.

**Job Loss Patterns, Subsequent Job Quality and Income Changes at Individual Level in a Transitional Manufacturing-Port City, Incheon, South Korea**

This study pays a particular attention to job loss patterns and the post-job loss changes in Incheon, South Korea. Incheon is actively transforming itself from a traditional industrial-port city to a post-industrial global city building on its proximity to China’s east shore and its newly developed ‘Free Economic Zone’ also known as Songdo. The city’s transitional status is apparent in the shrinking size and profit rates of manufacturing firms and spatial polarization between newly developed middle class areas and the old inner city. This study hypothesizes that these industrial and spatial changes are reflected in local labor market dynamics, resulting in higher and involuntary job loss rates in the manufacturing related occupations than in other cases. Income change after job loss is also expected to be greater than for other occupations. This pattern will also be spatially pronounced where manufacturing is concentrated.

To test these hypotheses, a panel analysis on five years of data (2008~2012) from the Regional Displaced Worker Survey, conducted by Bureau of Statistic in South Korea every year will be performed. Important variables such as job loss rates, unemployment period, and post-job loss changes in job quality and earnings will be analyzed.
against workers’ individual characteristics, such as age, race, marital status, gender, educational attainment and industry sector. Job quality is measured by changes in employment arrangements (fulltime and part-time) and inter-industry mobility (between high-end and low-end sectors). Earnings change is measured by the real earnings change between the previous and subsequent jobs.

Understanding these mechanisms provides insights to identify what kind of policy intervention can help creating more secure and well paying jobs, thus consequentially subdues the constantly growing income inequality in the city. The study contributes to the economic development and regional planning fields by highlighting the labor market dynamics that shape workers’ career development opportunities as well as affect job quality and income inequality.

References


Abstract Index #: 42

ASSESSING THE IMPACTS OF MARCELLUS SHALE GAS EXTRACTION ACTIVITIES IN THE SMALL COMMUNITIES OF SOUTHWEST PENNSYLVANIA

Abstract System ID#: 941

Individual Paper

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The recent boom in natural gas extraction activities from Marcellus Shale is resulting in rapid socio-economic transformations in the small communities of southwest Pennsylvania (PA). Although the presence of natural gas in Marcellus Shale had been recorded decades ago, profitable ways of its extraction have only been possible in the past few years due to innovations in hydraulic fracturing and horizontal drilling techniques. In southwest PA, the number of “Unconventional” wells that extract natural gas from unconventional sources such as, Marcellus Shale increased exponentially from 336 in 2008 to 3,658 in 2014 (PADEP 2014). Despite being in its initial stages of development Marcellus Shale gas extraction activities in PA generated thousands of jobs and businesses and billions in tax revenues since 2008, and are anticipated to grow steadily in the next few decades (Considine et. al. 2010).

Communities experiencing rapid economic growth with increase in energy extraction activities, such as natural gas extraction, are termed as “boombowns” in the literature. A number of longitudinal studies documented boomtown phenomenon in the communities of Wyoming, Utah, and other states in the 70s and 80s. These studies revealed the vulnerability of small communities largely dependent on extraction activities to economic fluctuations that come with the boom and bust cycles in energy industries, making boomtowns a challenge for planners and policy makers. The recent growth of Marcellus Shale gas extraction activities in southwest PA provides an opportunity to explore and document its preliminary impacts in the small communities. While some of these communities are already witnessing rapid growth in new development activities, such as single-family housing, offices, hotels, and retail spaces, due to the local economic growth, others are anticipating growth in the future. However, it is also perceived that the environmental and health risks associated with Unconventional well drilling techniques may pose serious challenges for development activities in adjoining areas.
The purpose of this research is to investigate the impacts of Marcellus Shale gas extraction on development activities in the small communities of southwest PA from 2008 to 2014. Specifically, this paper will 1) analyze the spatial pattern of new development activities occurring in the small communities of southwest PA, and 2) assess the impacts of geographic proximity to Unconventional wells on the development activities. The study area for this research includes Washington and Greene counties in southwest PA. The key questions posed here are: Does increase in Marcellus Shale gas extraction activities result in new development activities in the small communities? How does geographic proximity to Unconventional well locations impact the new development activities? Geospatial datasets on Unconventional well locations and their spud dates are collected from Pennsylvania Spatial Data Access (PASDA) and Pennsylvania Department of Environmental Protection (PADEP). Geospatial datasets on land parcel boundaries, land use, building permit and property information for Washington and Greene counties are acquired from OGI Info and Corelogic. Other relevant socio-economic information are collected from the US Census Bureau at the census block group level. Geospatial analysis and land use modeling techniques are applied to analyze spatial patterns of new residential, commercial and industrial development activities, measure geographic proximity of such activities from well locations, and assess the impacts of extraction activities on new developments in the two counties.

References


Abstract Index #: 43
THE CHARACTERISTICS OF MANUFACTURING IN A MEGA-CITY AND ITS IMPACT ON THE REGIONAL ECONOMY
Poster ID#: 666
Poster

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Industrial structure of developed countries has rapidly transformed from a dominant manufacturing sector to commercial and service sectors during the last several decades in a process of industrial restructuring. In addition, an international free trade has reinforced a division of labor that promoted manufacturing firms to move their production facilities to developing countries to minimize production costs and maximize profits. However, since the Great Recession, manufacturing has been recognized as an important economic base that can increase employment and secure the national economy. In this line, the federal government adopts a reshoring policy that supports production functions to move back to the country.

While the policy has been discussed at the national scale and manufacturing is located across the country, the manufacturing sector may play a significant role in the regional economy of metropolitan areas. However, many
local governments still give priorities on service industries, and a large scale of industrial lands have been converted to housing and commercial uses.

The purposes of this study is to identify leading and emerging urban manufacturing and their locations in a mega-city and to measure their impacts on the regional economy. Specifically, the research questions are:

1. What is the characteristics of urban manufacturing in a mega-city?"
2. “Do really urban manufacturing and industrial zones affect the regional economy positively?”

Literature identifies a positive effect at the national scale in terms of GRDP and employment, while its effect is mixed at the local level. In the case of the Seoul metropolitan region, this paper uses a spatial econometrics where changes in population, employment, and local tax revenues are used dependent variables, and the structures of manufacturing by sub-industry sector are used as independent variables along with other control variables. The models are run for the whole city boundary with 424 sub-administrative districts (Dongs) and 5 different sub-regions separately. Through the identification of leading and emerging manufacturing in a mega-city and their impacts of the regional economy, the results will provide policy implications to decision makers who consider a new industrial and land use policy for economic development.

References


LOCAL ECONOMIC DEVELOPMENT AND THE GEOGRAPHY OF THE ROBOTICS INDUSTRY

There has been an increase in popular media stories about robots because recent technological advances make the prospect of their entrée into work and daily life more an imminent reality than a fantasy. An overlooked aspect of the rise of the robots is their implications for local and regional economic development. Our paper begins to address this by describing the geography of the robotics industry and situating it within existing knowledge, policies, and trends in regional development.

The primary contribution of our work is to develop a comprehensive map of the robotics industry in the United States. This research is performed “manually” because, with the lack of a North American Industrial Classification System (NAICS) code specifically designated for robots, there is no way to determine the spatial patterns and characteristics of the robot industry from existing formal data sources. Our database development combines membership lists from the North American trade association for robotics with several proprietary online business databases, including ThomasNET and ReferenceUSA. With our database, we will map and conduct descriptive spatial analyses of the geographic relationship of robotics firms and clusters to other important co-predictors of robot-aware regional economic development.
The robotics industry is unique and complex. It lies at the nexus of production, service provision, and innovation. Robot suppliers produce robots and a wide-ranging array of peripheral and auxiliary components. Within the services sector, a highly skilled and specialized set of advanced producer services firms called integrators assists manufacturers in implementing robotic systems.

After decades of use in large advanced manufacturing operations, smaller, safer, and cheaper robots are finding their way into small shops. Robots are also entering other fields such as healthcare, logistics, and domestic services. Robotics thus has innovative potential on two levels: the first is in relation to the robotics technology itself, and the second relates to the new products and processes that robot-users will be able to develop.

Straddling the boundary of the service and manufacturing sectors, the geography of robotics is particularly relevant for planners and economic developers because it has implications for regional growth. Within an industry cluster framework (Porter, 2011), local expertise in robotics can serve to strengthen linked industries and become a driver of competitive advantage. Robotics also includes producer service firms, which are important parts of both global value chains and local economies (Malecki, 1997). Recent scholarship suggests that contrary to post-industrial narratives, the co-location of production and innovation actually continue to track strongly with regional growth (Clark, 2013). Along these lines, current research, coinciding with an uptick in manufacturing employment since the Great Recession, is renewing the idea that manufacturing—albeit in a more efficient and highly productive form—is a foundational element in regional economies (Leigh & Choi, 2013). At the same time, the historical record of worker dislocation due to the introduction of new technology is a long one, and robots pose a new threat.

To understand how the robotics industry fits into local and regional economic development, we must first understand its geography. In the absence of formally collected data, our mapping project will serve this purpose. It will also be a starting point for related policy and strategy discussions.

References


Abstract Index #: 45
THE IMPORTANCE OF QUALITY OF LIFE IN BREWERY LOCATION DECISIONS
Abstract System ID#: 694
Pre-organized Session: Innovation, E’ship & Economic Development II

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Traditional firm location theory (Weber, Moses, Hotelling, etc) explains firm location decisions in terms of factor prices, transport costs of inputs and outputs, and strategic moves to gain spatial monopoly over markets. While these remain centrally important, a number of firms selling directly to consumers have begun to make public claims about the importance of local culture in location decisions. To some degree, these claims may be simply a form of “lifestyle” branding, but alternatively they may reflect actual particular locational advantages though quality of life amenities or cultural resources. The craft brewery industry is one with the potential for many secondary factors to play a role in location decisions. We analyze the location decisions of regional craft brewery expansions and relocations to determine the relative importance of factors contributing to the location decision. We interviewed craft brewery executives, site consultants and public officials in the selected towns about the
factors that contributed to the decisions of the breweries. We focus on the three groups of factors: traditional location factors (market size and distance, transportation, cost of inputs), competitive milieu (taxation, public services, education, agglomeration), and quality of life (cultural amenities, housing options, recreation).

Abstract Index #: 46
IMPROVING TIF TRANSPARENCY AND ACCOUNTABILITY: TOWARDS A CONSOLIDATED VIEW OF TIF ACTIVITIES IN MICHIGAN
Abstract System ID#: 717
Individual Paper

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Tax Increment Financing (TIF) is one of the most popular funding mechanisms used to finance downtown and other local economic development projects in the United States. However, California’s recent dissolution of its over four hundred Regional Development Authorities, many of which relied heavily on tax increment revenue to issue bonds that financed redevelopment activities, has caused considerable concern about the possibility of legal challenges across different communities of economic development practitioners. The Michigan Legislature is currently in the process of evaluating a series of state-level legislative proposals that potentially imply significant changes in the structure and participation of TIF’s, possibly limiting the scope of this economic development option in Michigan. The opportunity costs of such modifications to TIF practice are not easily quantifiable for public policy makers or local economic development specialists because statewide data that could help analysts evaluate the extent and effectiveness of these tax capture tools simply does not exist. This proposal seeks to contribute to the current policy discussion on TIF reform by demonstrating the barriers that exist for TIF reporting in the state of Michigan. As such, we develop a blueprint for a comprehensive, state-level database on the scale, scope and structure of TIF activities in Michigan (Michigan Repository for TIFs “MiRTIF”). Categorizing, classifying and standardizing the reporting on all active TIFs in the state in a consistent manner, the MiRTIF is intended to provide a consolidated view for making meaningful fiscal comparisons at different levels of state and local government.

References

Abstract Index #: 47
REACTIVE RECRUITING: ECONOMIC DEVELOPMENT PLANNING AND THE GROWTH OF REQUESTS FOR INFORMATION (RFIS)
Abstract System ID#: 719
Individual Paper

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Economic development practitioners at local and regional scales devote a great deal of effort toward attracting capital investment from outside the area (ICMA 2014; Rubin 1988). Much of the scholarship of practice has
characterized this activity as proactive, comprised of outreach to individual firms, attendance at trade shows, and
the crafting of marketing materials (Levy 1996). Anecdotal evidence suggests that in many cases, recruitment is a
reactive process (LeRoy 2005). Cold calls to firms yield little benefit, and high profile visits by political leaders,
such as those of Texas governor Rick Perry to California, are designed to attract voters as much as firms. On the
other hand, requests for information (RFIs) from site selection consultants entice economic development
practitioners with the possibility of real interest from an outside firm. Thus far there has been little research
on this latter reactive aspect of business attraction, though it likely demands as much or more effort from economic
development organizations as more proactive approaches.

This paper addresses the impact that the need to respond to RFIs has on local and regional economic
development practice and explores several related hypotheses. As a means of producing information about a
locality or region, responding to RFIs may constitute a useful planning activity as described by Hopkins (2001).
One possible result of this is that the data produced through the growth in RFIs has actually resulted in more
informed economic development practitioners. On the other hand, the reactive nature of responses to RFIs and
the time it takes to prepare them might undermine practitioners’ knowledge of their region in two ways.
First, it might limit the nature of the information produced as compared to more general planning methods
such as economic base studies or target industry studies. Second, the effort required to produce RFI responses
might sap resources that could have been spent on more strategic analytical efforts.

This research uses data gathered from interviews with economic development practitioners at local and regional
scales in the US to explore the above hypotheses. In doing so, it contributes to the literature on planning and
economic development in several ways. One, it takes a growing but understudied aspect of economic
development practice – responding to RFIs – and makes it the subject of direct research. Two, it draws on
theories of planning to inform economic development practice, building on earlier work in a similar vein by the
author and expanding the scope of planning scholarship.

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is not simply one-directional—the relationship is sometimes cooperative, with local governments and state representatives working closely to negotiate local governance and ensure that state and local economic development interests align. The relationship can also be conflictual, with local governments exerting power over state level policy decisions or states thoroughly dominating local authorities. In short, local autonomy is contextual, by the nature of the policy area, the type of jurisdiction, and the influence of the jurisdiction in the state (Burns and Thomas 2004).

In this research, we seek to discern trends within these contextual relationships through the application of urban regime theory to state and local government relations regarding economic development. We suggest that jurisdictions in close proximity to dense, tax-rich population and business centers are likely to have substantial power over local economic development relative to state governments than jurisdictions that are more sparsely populated. Conversely, very sparsely populated areas are likely to have local control only when local economic development policies conform to state priorities. If there is a divergence between state and local goals, then states are likely to exert nearly unlimited control over local decisions in very rural areas. Our main focus is on economic development at the urban-rural fringe; jurisdictions that are largely rural but are close to the urban region and are accessible to metropolitan residents. We see these regions as potential areas of conflict between state and local interests where states are neither paternalistic nor partners in economic development.

Drawing on four Virginia counties with varying levels of state interest and control, we suggest that the nature of the local governing regime will affect the extent to which the state-local relationship is characterized by cooperation or by conflict. We assess this relationship via an exploratory study of the development of Virginia’s wine industry at the urban-rural fringe. Through interviews with state and local representatives, local residents, and wine industry interests, we identify the economic development regimes and power structures at the local level, describe the nature of the state and local relationship, and consider the lesser-known implications of state support for wine industry growth as rural areas shift from agricultural production economies to rural tourism consumption economies (Centonze 2010).

References

geographic patterns requires data that has long eluded us (Arauzo-Carod, Liviano-Solis & Majón-Antolín 2010; Feldman 2001; Figueiredo, Guimarães & Woodward 2004). Attempts to analyze small-scale entrepreneurial firm location patterns must address not only the factors that have shaped pre-existing, intra-regional economic heterogeneity, but also the unique characteristics that drive the decision-making process of subsequent founding entrepreneurs. To do so requires not just in-depth regional data, but also detailed firm- and entrepreneur-level data.

This research takes critical steps towards closing the theoretical gap between firm location and entrepreneurial literatures through two inter-related questions. First, how do entrepreneurial pathways—that is, the employment and educational histories of entrepreneurial firm founders, particularly those related to anchor firms and major universities—influence small-scale, intra-regional entrepreneurial firm location decisions? And second, how do these pathways cumulatively shape a region’s small-scale entrepreneurial geographies?

To answer these questions the research utilizes a mixed-methods approach, one that relies on both spatial and visual analyses of firm location point data and semi-structured entrepreneurial interviews. To limit impacts of both industrial and regional effects, the research focuses solely on biomedical firms founded in North Carolina’s Triangle region between 1991 and 2010. Data are drawn from two distinct sources: a proprietary database of entrepreneurial and anchor firms in the region (which in turn relies on dozens of sources; see Feldman & Lowe 2014), and matched records of these firms drawn from the National Establishment Time Series database. Interviews are conducted with entrepreneurs who founded firms in the proprietary database.

Combined, the data provide detailed information on both firm and entrepreneurial histories, as well as information on the larger biomedical landscape in the region. The mixed-method approach allows the research to first identify the extent to which competing entrepreneurial ties to local anchor firms and universities influence their location decisions, and then explore the process through which these ties influence location decisions. The study’s twenty-year time period allows the research to explore the extent to which small-scale locational patterns have changed over time—and the reasons behind these shifts.

The research makes several contributions to the literature and practice. First, the research represents a key step towards filling the theoretical gap that exists between the traditional firm location and regional entrepreneurship literatures. Second, the research advances our understanding of the forces that shape and cumulatively sustain or break small-scale geographies of entrepreneurial concentration within a region. Third, to the extent that practitioners address inequitable economic geographies when crafting economic development strategies, the research illuminates how promoting entrepreneurship may either reinforce or mitigate pre-existing development patterns.

References

Since 1970, the economies of metropolitan Los Angeles and the San Francisco Bay Area have experienced divergent fortunes, with the Los Angeles region vastly underperforming its northern neighbor. In 1970, per capita income in Los Angeles was around 91% of that of the Bay Area. At that time, the two regions ranked 1st and 4th in terms of per capita income amongst all regions throughout the United States. In 2010, by contrast, per capita income in Los Angeles had fallen to 66% of the Bay Area’s level and the regions ranked 2nd and 56th, respectively, in the nation. A proximate cause of this divergence lies in changes in the activities that each economy performs, namely, the industries in which they specialize. However, why is it that the Bay Area is now the world’s leading metropolitan region in the New Economy, while Los Angeles, which in 1970 contained industries as technologically advanced as those found anywhere in the world, has failed to gain traction in today’s leading industries?

At first glance, it is easy to conclude that Los Angeles has fallen on relatively hard times because of the loss of much of its aerospace sector after the end of the Cold War, while the region has been a major recipient of low-skilled immigrants from Latin America. By contrast, it is clear that San Francisco has “won” the information age lottery, becoming the world center of that technological revolution and attracting highly skilled immigrants. However, this in-depth case study reveals major differences between the two regions in social and economic networks, the practices of their firms, and the overall ecology of organizations in their economies, which has enabled the two regions to respond differently to the opportunities presented by the New Economy.

Economic development as an academic field contains diverse theoretical elements that explain the divergent performance of regional economies. We draw on four theoretical streams: international and comparative development theory, urban economics, economic geography, and the study of institutions to understand economic change in the two regions. Drawing on detailed quantitative and qualitative research, this study concludes that standard theoretical tools – notably those provided by urban economics and development theory – fall short in explaining the regions’ evolving specializations, and this work points to institutional differences that have enabled changes in specialization and thus development across the two economies.

The divergent economic trajectories of the San Francisco and Los Angeles metropolitan regions have important implications for individuals, families, communities, firms, and governments, just as they would if we were studying the contrasting fortunes of two independent countries. Had Greater Los Angeles maintained its position as the fourth wealthiest metropolitan area in the United States, its economic output and per capita income would be almost a third higher today. This study sheds light on those forces that shape the performance of regional economies.

References

- MLA

Abstract Index #: 51
A NEW POLITICS OF ECONOMIC DEVELOPMENT? IDEOLOGY, PARTISAN COMPETITION, AND GOVERNANCE IN THE REALIGNING SOUTH
Abstract System ID#: 853
Individual Paper

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Despite long-standing criticism of the practice as inequitable and ineffective, state and local governments often use business incentives to induce capital investment and firm location decisions as they compete against one another in a spatial market for jobs (Markusen, 2007). Scholars have traditionally told two straightforward stories
of how politics influences incentive granting. In the first—the ribbon-cutting story—elected officials pursue economic growth and job creation as a normative good in order to win re-election, and securing ribbon-cutting ceremonies with newly located or expanding businesses is one of the most publicly visible means of showing job creation to the electorate. In turn, elected officials exert pressure on practitioners to “win” a firm location decision at any cost. This leads to higher rent extraction than would otherwise be the case (Markusen, 2007; Rubin, 1988), especially during times of economic distress. The second story involves regulatory capture. Business interests hold elected officials in thrall through campaign contributions and cultural and fiscal ties that privilege business in the setting of economic development policy. As the business lobby’s influence over the policy process increases, elected officials are pressured into increasing the public rents available for business to extract (Molotch, 1993). Both stories assume a political economy of incentive granting that reinforces business privilege and economic inequality.

Yet these traditional stories about the role of politics in incentive-granting ignore the extent to which a community’s institutional context shapes the bargaining process over firm location decisions and incentive offers. While the traditional focus on economic growth remains normative among policy makers at the state and local levels, the policy question of how to best promote growth has become increasingly contested as partisan realignment and ideological competition have brought into question previously sacrosanct economic development tools like business incentives. In turn, this more complex political map is mediated by a governance regime that yields economic development policy outcomes often quite at odds with what the traditional stories would predict. These governance institutions—including the growing use of accountability standards and fiscal controls (Warner & Zheng, 2014)—set the rules by which incentive decisions are made and, by extension, the ways in which political pressures are brought to bear on these decisions. This project attempts to address these shortcomings by exploring the following questions:

1. What political factors influence incentive policy decisions, and how do they do so?
2. What role do incentive governance institutions play in shaping the relationship between a more complex political environment and incentive-granting decisions?

The project answers these questions through a critical case analysis of the incentive policy decisions made across eight legislative sessions of the NC General Assembly, 2007–2014. The study period includes four sessions on either side of the Great Recession and the realigning 2010 elections, allowing me to study incentive policy decisions in the context of economic distress and partisan control of government as they change over time. In a critical case approach, the project then tests the empirical reality of these policy decisions (and why they were made) against what the traditional stories about politics and economic development would predict under these changing conditions. North Carolina is the only southern state to have experienced divided government, high unemployment, and strong incentive governance all at the same time, making it an ideal case for testing the traditional story.

For data collection and analysis, the project codes interviews, media clips, and legislative debate records related to common categories of incentive policy decisions made across all eight legislative sessions. This provides a unique dataset for understanding the complex political and governance-related factors driving incentive policy decisions—the primary contribution of this project.

References

JOB LOSS AVOIDANCE AND EXOGENOUS SHOCKS: AN ANALYSIS OF BRAC ACTIONS

In September of 2005, the Defense Base Closure and Realignment (BRAC) Commission released its final recommendations for military installation realignments under the 2005 BRAC round—the formal process by which the federal government identifies military installations for closure and realignment. The latest BRAC round impacted roughly 200 installations across the United States and abroad as bases were shuttered and personnel were relocated to other installations. Like any major economic event, BRAC has significant impacts on the communities surrounding these installations, particularly for regions with a heavy reliance on the installation for its employment base. While the Department of Defense (DoD) may benefit from eliminating excess infrastructure, the impact on the surrounding community can be detrimental. Some regions were able to recover more quickly than others in the wake of this economic event. This paper seeks to understand why certain communities were more resilient than others. Specifically, we examine what local conditions existed in communities whose employment figures rebounded, and what conditions existed in those that did not report job recovery in order to understand what factors contribute to job loss avoidance.

We employ qualitative comparative Analysis (QCA) to examine characteristics of the local economy in conjunction with other conditions sufficient for the avoidance of job loss at the local level. In addition to its usefulness for small and intermediate sample sizes, QCA has advantages for examining diversity among configurations of causes that may lead to a similar outcome—in this case, the avoidance of widespread job loss in BRAC-impacted communities.

There is a sizable body of work examining the characteristics and impacts of defense reductions. However, much of this centers on defense industry cuts rather than installation closures. This paper seeks to fill this gap in the literature by examining the impact of personnel drawdown associated with physical base closures (which in many cases result in large tracts of land that must now be repurposed). It is likely that the federal government will issue another BRAC round in the future. Therefore, understanding what local conditions help and hinder resilience in the wake of personnel drawdown is useful to local planning officials as well as the DoD’s Office of Economic Adjustments (OEA)—the body charged with assisting defense-impacted communities. More broadly, this paper contributes to the literature on economic recovery and resiliency, and its findings would be applicable to communities undergoing any exogenous economic shock as they seek to mitigate its negative impacts.

References


REGIONAL SOFTWARE PRODUCTION: FIRMS, LABOR-MARKETS AND PLACE

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This paper seeks to understand the extent that regions with software agglomerations exhibit regionally specific configurations of firm strategies, labor-market structuring and space and place characteristics. First, this paper will compare these configurations, as regionally specific modes of production, to the ideal types of industrial districts identified by Markusen (1996). Using both the most recent data combined with change since the dotcom era (roughly 2002), this analysis will contribute to understandings of the industrial restructuring of the information technology industries, the software industry and the spatial dynamics of software innovation. Second, this paper will measure the extent that different regional modes of production yield different industry and regional economic development outcomes by measuring both regional-level and industry-level economic development outcomes and their degree of relationship to regionally specific modes of production. In summary, this paper will identify regional modes of production, map them onto ideal-type theorizations of industry typologies and regional production typologies (industrial districts), and asserts that divergent modes of production yield divergent regional and industry outcomes.

References

Abstract Index #: 54
ANCHOR UNIVERSITIES IN REGIONAL ENTREPRENEURSHIP ECOSYSTEMS: A CASE STUDY OF TWO COLLEGE TOWNS
Abstract System ID#: 1053
Pre-organized Session: Innovation, E’ship & Economic Development II

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There has been a growing scholarly interest in the role universities in regional entrepreneurial activity for the past two decades (for a review, see Rothaermel et al. [2007]). At the core of this line of literature are the commercialization of university research and its association of with various types of entrepreneurial activity. A careful examination of the literature identifies at least three research gaps in existing studies: (1) While a regional economy can prosper with an anchor-based economic envelopment strategy (Markusen, 1997), evidence on the role of universities in facilitating regional entrepreneurial activity has been unclear. (2) The university is the major asset of American college towns, but research on the relationship between universities and entrepreneurship in the context of regional economic development of American college towns is strikingly rare in the literature. (3) A holistic approach to the study of university entrepreneurship is needed.

To address these gaps, this research aims at a systematic investigation of the university-entrepreneurship relationship in regional entrepreneurship ecosystems of American college towns. In particular, we will conduct in-depth comparative case studies on two representative college towns: Boulder, CO and Iowa City, IA. Boulder, home to Colorado’s flagship university, is perhaps the most entrepreneurial college town in the U.S. Iowa City, home to Iowa’s flagship university, on the other hand is a typical Midwest college town with low entrepreneurial activity. The purposes of the comparison are to examine (1) the differences in regional entrepreneurship ecosystems between these two college towns and (2) whether the divergence of regional entrepreneurial performance at least in part results from the different role of the two anchor universities (i.e., the University of Colorado and the University of Iowa).
For each case, we will interview both university administrators that are relevant to the decision making of university entrepreneurship/economic development strategies, and local entrepreneurship support organizations as well as economic development policymakers/practitioners who work on facilitating entrepreneurship in the local economy. The purpose of the interviews is to obtain information on:

- Major players and efforts in the regional entrepreneurship ecosystem;
- Details of university strategies and programs for entrepreneurial development;
- Self evaluation of the effectiveness of university entrepreneurial efforts;
- Barriers to university entrepreneurial development;
- The university’s interactions with local entrepreneurship support organizations, economic development policymakers and practitioners in fostering entrepreneurial activity;
- Local entrepreneurship support organizations, economic development policymakers and practitioners’ views on the role of universities in local and regional entrepreneurship development strategies.

Ultimately, entrepreneurs lie at the core of entrepreneurship. Therefore, we will conduct in-depth interviews on local entrepreneurs both in Boulder, CO and Iowa City, IA. The purpose of these interviews is to obtain the information on:

- Major players and efforts in the regional entrepreneurship ecosystem from the perspectives of entrepreneurs;
- Entrepreneurs/startups’ associations with the university;
- Entrepreneurs’ evaluation of university entrepreneurship efforts;
- How their businesses have benefitted from or been impeded by the university;
- Relative importance of different types of university services to entrepreneurs;
- Potential new roles of universities in entrepreneurship.

In each town, we will interview at least 20 entrepreneurs. To guarantee that enough information on the role of universities can be obtained through these interviews, about one third of interviewees will be selected from clients of university entrepreneurship programs. The other two thirds will be identified via entrepreneurship support/economic development organizations, among others. The selection of interviewee entrepreneurs will also take into account the industry base of each city.

References

Abstract Index #: 55
THE TEXAS MEDICAL CENTER: MONUMENTS AND MYTHS IN THE BIOMEDICAL ECONOMY
Abstract System ID#: 1102
Individual Paper

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This paper examines the history of intersections between local economic development actors and the steadily increasing footprint of the health care industry in urban and regional economies of the United States. Specifically, I highlight Houston’s Texas Medical Center (TMC) as an archetypal case of the “urban biomedical district.” Such designated contiguous zones of hospitals, academic medical centers, and other health-related activities exist simultaneously as 1) a development and land governance strategy; 2) a distinctive urban form; and 3) a model replicated across dozens of cities in recent decades. I argue that, in Houston as in other cities, such districts in a proximate sense reflect organized responses to local crises of urban development and in health care organizations coping with reform, competition, and fiscal constraint. Ultimately, and in a manner that
characterizes other transactions between economic development policy and health care, the development of urban biomedical districts has been tailored at different stages to the needs of powerful but contested organizations driving reproduction of the institutional field of biomedicine (Scott et al. 2000).

The argument unfolds in two steps. First, relying on interviews and an extensive review of the TMC archives, a detailed historical case study of the birth and growth of TMC, “the largest medical complex in the world” and one of the first officially designated medical districts, starkly illustrates the emergence and evolution of this distinctive form of urban development alongside key episodes of growth and lapse in Houston’s economy. Spanning over two square-miles with over 100,000 employees, TMC now touts itself as the eighth largest business district in the country. Yet until relatively recently, TMC as a governance entity has arguably only passively embraced its role as a major economic engine. Historicizing this case deliberately side-steps the prevailing frameworks in economic development practice and scholarship of the health care economy’s function in cities, such as “Eds and Meds” (Harkavy and Zuckerman 1999) and life sciences sectoral innovation strategies. Instead, I critically frame this circumscribed engagement as an expression of institutional authority in the biomedical economy filtered through political economy of urban entrepreneurialism.

Second, the paper pivots to an examination of TMC’s record as a successful development model, which has attained a limited degree of replication by other localities that have more recently taken an entrepreneurial approach to designating and cultivating urban biomedical districts. Though TMC has been held up as a model “innovation district” (Katz and Wagner 2014), its history illustrates the shortcomings of causal narratives that downplay the role of state intervention and institutional power.

Attention to local economic development planning actors, the construction and diffusion of development models, and the scientific and technological dimensions of institutional change at scales beyond the local adds context to ongoing attempts by economic development practitioners to exploit growth in the health care economy for job creation, economic diversification, and regional innovation strategies. In many ways, these policies create fertile platforms for efforts by health care organizations to restructure the delivery of care and by the life sciences industry to redistribute risk in the development of new technologies to state and local governments. Meanwhile, economic development actors selectively reproduce and reconstruct narratives of development that abstract the emergence of local development opportunities from a national health care system in crisis. Framing the uniquely American variant of institutional biomedicine as a historical urban process illustrates the constrained but increasingly supportive role of economic development practitioners in the large and growing economy of health care.

References


Abstract Index #: 56
EMPIRICAL STUDY ON LOCATION FACTORS OF URBAN MANUFACTURING IN SEMI-INDUSTRIAL ZONES OF SEOUL, SOUTH KOREA
Abstract System ID#: 1122
Poster

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The recent global financial crisis suggests that cities dependent on single industrial sector, such as services, are no longer sustainable in terms of economic health, emphasizing the diversity of industrial structure. As witnessed in rust-belt areas, many communities specialized in manufacturing only have suffered from the decline due to the transformation of industrial structure. The diversity of industrial structure may minimize such a negative impact when one industrial sector experiences a rapid decline. However, the Great Recession also gives us a lesson that manufacturing can provide an important economic base particularly for those urban areas that are critically dependent on the tertiary industry. Especially urban manufacturing is not only able to create jobs for various income classes but also has a significant effect on other sectors, such as tourism, services, and high-tech industries. While the Seoul metropolitan government has prepared a strategic plan, ‘Smart Economic City Seoul’, to support major urban manufacturing, such as fashion, machinery, jewelry, and publication, the semi-industrial zones, which share about 4.5% of the administrative area of Seoul, are under threat from the conversion to residential, commercial, and business land uses. Policy makers and planners in Seoul also try to preserve the semi-industrial zones for future economic and industrial bases rather than converting them to other land uses. However, the question becomes what industries they need to support and how.

In this context, the purpose of this study is to identify competitive urban manufacturing in Seoul’s semi-industrial zones and analyze their location factors to help planners develop an integrated policy of industrial and spatial planning that can enhance productivity of urban manufacturing and increase the amenity of physical environments.

Previous literature uses logistic and descriptive analyses to identify location factors, such as accessibility, socio-economic characteristics, information technology, but there is no consideration of spatial proximity among businesses and physical characteristics, such as floor area ratio, size of lot, and so on. This study employs a mixed method approach that combines space divisions with spatial econometrics. First, semi-industrial zones are divided into hexagonal cells. Each cell has the characteristics of urban manufacturing and their locations. Second, the spatial econometrics identifies location factors with the number of urban manufacturing (establishments and employees) as a dependent variable.

The results show that the agglomeration of specific manufacturing and the proximity to related industries are found as primary factors of the location of urban manufacturing, while the factors are slightly different by sub-industry sector of urban manufacturing.

References


Abstract Index #: 57
HARD TIMES IN THE BIG EASY: DISASTER RECOVERY IN A TOURISM-DEPENDENT CITY
Abstract System ID#: 1147
Individual Paper

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New Orleans is among the most popular tourist destinations in the United States, attracting millions of domestic and international tourists each year. The city is especially known for the many events it hosts on an annual or
semiannual basis, from small-scale conventions, corporate meetings, and local food festivals to mega-events such as the Super Bowl, the New Orleans Jazz & Heritage Festival, and Mardi Gras, one of the most popular regularly-scheduled leisure events in the United States. Due largely to an aggressive tourism-oriented urban regime and a lack of viable alternatives, New Orleans has become heavily dependent upon an event-based economy and the hospitality industry underlying it as an engine of economic growth and job creation. By 2012 more than one-in-four jobs in New Orleans were tourism-related, a greater share than any other industry and a considerably greater share than in 2004, the year before Hurricane Katrina.

At the same time New Orleans has grown increasingly dependent on tourism, New Orleanians have continued to suffer from a host of social ills. Surveys have shown that many adults in the city lack basic literacy skills, more than 40 percent of children live in poverty, the city's murder rate consistently ranks among the highest in the nation, and Orleans Parish (the central city of the New Orleans metropolitan area) is, after Manhattan, the most unequal urban county or parish in the United States.

In this paper I place the growth of the New Orleans tourism- and event-based economy in the decade since Hurricane Katrina within a larger context of social and human development. Given that other U.S. cities with vibrant tourism industries do not always display the same range of social problems found in New Orleans, I pay particular attention to the links between social outcomes in New Orleans and the city's economic base. I conclude by considering the degree to which the New Orleans case, or particular aspects of it, may generalize to other cities with large tourism- and event-based economies.

Abstract Index #: 58
DENSITY WARS IN SILICON BEACH: THE STRUGGLE TO MIX NEW SPACES FOR TOIL, PLAY AND STAY IN SANTA MONICA, CA
Abstract System ID#: 1163
Individual Paper

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The ocean-side community of Santa Monica, encircled from all sides by the much larger City of Los Angeles, has long been one of the premier tourist destinations along the California coastline. Yet market analysts contest that Santa Monica has now gone ‘from beach town to boom town’, with a slew of dense, mixed-use development projects slated for completion in the near future that many see as a tipping point in the city’s development. Creative industries (film, fashion, new media and tech companies) along with tourism activity now dominate the economic landscape. Newcomers and temporary visitors clash with long-term residents in their visions for the city’s future, and the new, developer-friendly climate in Santa Monica is seen in stark contrast to ‘the People’s Republic of Santa Monica’s’ earlier tradition of lower-density, slow growth, progressive urban development policies that were focused on the supply of public benefits. Yet these public benefits – well-maintained parks, affordable housing, good public transit and parking – were of course precisely the key elements that distinguished Santa Monica from its larger neighbor Los Angeles and subsequently made the city a more attractive place to live, work and play in the first place.

In the case of Santa Monica, this somewhat familiar story of a well-governed, progressive, attractive place becoming victim to its own success contains some interesting twists, and these will be the focus on this chapter. Following a short literature review linking developments in Santa Monica to larger processes of urban revitalization and rescaling, the chapter will unpack the complex scales and consequences of protest and resistance against two key pro-visitor oriented development sites in the city (the redeveloped Civic Center area and the new Bergamont Transit Village). It will reveal new fault lines among protagonists not just between recent and long-term residents but also along ethnic and generational lines. Few scholars have highlighted the fact that there is an important flip-side to the cliché of the elderly, white anti-development resident: younger, non-white residents are not necessarily neutral on matters of density and development, but are in fact often strongly supportive of it. Data from Santa Monica’s 600+-page 2014 Development Survey Report reveals that a majority of Santa Monicans between ages 18 and 24 strongly supports new hotel development, and that over 60 percent of
African Americans and Hispanics were either strongly or somewhat in support of proposals for new hotels in the city. Responses were also telling in the case of the Bergamot Area Plan, which was supported by 96 percent of the city’s Hispanics and 75 percent of Asian Americans. The chapter also discusses the consequences of a broadened, multi-ethnic and multi-generational perspective on future tourism development priorities.

Abstract Index #: 59
WHAT CULTURAL ECONOMY HAS BROUGHT TO PEOPLE: THE EMPIRICAL EVIDENCE OF INDUSTRIAL HOMOGENIZATION AND RESIDENTIAL HOLLOW IN THE OLD CORE OF SEOUL
Abstract System ID#: 1172
Individual Paper
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Cultural economy seems to have two contradictory faces. It is strategically elaborated by planners in favor of it as a fume-less engine of new economic growth in post-industrial era. On the other side, it is criticised for bringing deeper inequality to those who are vulnerable to the changes that it brings about. As well as policies chasing after the duplication of precedent success, there have been reflexive recognition that discussed if it had brought any real cultural development to society, but, according to which, it is fairly hard for planners and policy makers not to lose direction but to maneuver for a tamed outcome.

For the basis to discover any lever to control negative ramifications, this study is to investigate what happened to the rest of economic actors who were unattended majority behind a few glorious spots of cultural economy in Seoul and how big the scale of the change was. Empirically, it examines the longitudinal change of the industrial composition of sub-districts within central Seoul for 20 years, from the incipient stage to present, focusing on how resources and production activities were reorganised and distributed spatially in terms of employment and enterprise activity during the growth of cultural economy. The analysis will address the initiation, evolvement, and the industrial effect of cultural economy as the basic trajectory of the change with its phasic features, which the questions below accompany.

- What was the path of change in the industrial composition of central Seoul during the period?
- What was the contingent push factor and its direct effect in terms of industry migration or resident displacement and substitution?
- How can we evaluate the effects?

The change of industrial composition is extracted from the annual data of national firm census that surveyed all the entrepreneurial activity. Since the old core of Seoul is planned and elaborated by municipal policy for a decade to be an epicenter of cultural economy, the analysis includes exploring those policies and other contingent factors. The changes of residential neighbourhood in central Seoul is described with the data of real estate transactions and resident registration.

While this study is on-going, the preliminary findings of this study suggests that cultural economy has serial phases with respective leading actors of each phase, which would result in consequential industrial migration. It also homogenized the industry composition when the area exposed to excessive change that was ensued by the substitution of the resident, which might risk economic resilience and sustainability.

References
SHRINKING CITIES: PROCESSES PRECEDING POPULATION CHANGE AND THE PLANNING RESPONSE

As urban shrinkage progressively becomes more commonplace, a better understanding of the processes preceding changes in migration and natural balance is needed. Alternative attitudes, strategies and policies must be developed to address the associated challenges. While urban shrinkage research is well established in Europe and is gaining momentum in the American discourse, Canadian academics and practitioners have been reluctant to explore issues concerning slow growth, no growth and shrinkage. This reluctance has been attributed to the absence of strategies and best practices in the planning toolbox that would provide guidance for urban areas experiencing shrinkage. This paper contributes to an emerging body of global research by examining the temporal dimension of the economic-demographic relationship in shrinking cities, and bridges transnational knowledge by assessing the potential for introducing foreign strategies into the Canadian jurisdiction. Specifically, it asks – in Canada, how applicable and feasible are planning policies and strategies that address the challenges of shrinking cities?

Response strategies to urban shrinkage were identified through an in-depth analysis of the academic and professional literature in both the North American and European discourse. 225 discussions of strategies were identified in the literature, summarized and catalogued into five groups: revitalization, consolidation, demolition, greening and land banking. An evaluation framework, adapted from current policy transferability literature, was developed and applied to assess the transferability of shrinking cities strategies to the Canadian context.

In order to ascertain the current and projected extent of Canadian urban shrinkage, a vulnerability assessment examining economic, demographic and socioeconomic trends was conducted for every city (with population over 10,000) in Canada. Due to historical and projected population loss, economic transformations, and similar demographic and geographic profiles, Cape Breton Regional Municipality, Nova Scotia and Chatham-Kent, Ontario were selected as case studies. Although factors contributing to urban shrinkage are well known, the evolution of these factors within the process of urban shrinkage process is not. A 19 variable multi-criteria time series analysis of each city was conducted in order to identify and establish trends in the evolution of the urban shrinkage process. Cross-correlation calculations were used to determine temporal relationships between variables, and to establish a timeline of events within the process of urban shrinkage.

The time series analysis confirmed that urban shrinkage is a non-linear, complex process with strong interrelations and iterative loops. Additionally, the case study comparison demonstrated interregional differentiation as the two cities had unique shrinkage trajectories. The evolution of urban shrinkage processes in each case study city were considered and, based upon its unique profile, matched with shrinking cities strategies considered potentially transferable to the Canadian context. Given that Canadian urban research is heavily fixated on large urban areas and tends to ignore or discount peripheral depopulation and its associated costs, there is a pressing need for additional research on declining urban areas. This research will assist policy-makers, planners and communities in general in planning for urban shrinkage as the associated challenges have, thus far, been met with little success by the Canadian planning profession.

References


Abstract Index #: 61
UNDERSTANDING URBAN RENEWAL PROCESSES THROUGH SAM-MULTIPLIER ANALYSIS: A CASE STUDY OF BOGOTAÁ’S DOWNTOWN
Abstract System ID#: 1279
Individual Paper

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The District Administration of Bogota, Colombia wants to implement an urban renovation process in the neighborhood of Fenicia, located in the city’s downtown. This project includes an urban and social transformation of the area and its main goal is to promote comprehensive development of the zone as well as to fulfill the basic needs of the community.

Gentrification is a typical phenomenon associated to urban renovation processes. There is ample evidence that neighborhoods with advantageous location are more likely to experience this phenomenon (London and Palen 1984; Brueckner, Thisse, and Zenou 1999; Helms, 2003). Fenicia’s strategic location makes gentrification very likely once its renovation takes place. Given the important implications of this phenomenon, like the displacement of the original population as a consequence of rent increase (Gould and O’regan, 2011), this study determines the potential economic effects of the Plan in the Fenicia neighborhood and in the city of Bogota.

Evidence on the potential economic effects of Bogota’s downtown renewal projects encountered so far is based on a static cost-benefit analysis. It is found that the aggregate net change in social welfare has a net present value of approximately US$120 millions. Property owners are the group of agents that would benefit the most from the project, since their asset valuation and rent increase would be in the order of 93%. The study also suggests that owners might experience an increase in living costs as a consequence of gentrification, and that this situation might induce negative effects on welfare for certain social groups.

In order to have a broader understanding of the social and economic impacts for the city we built a Social Accounting Matrix-SAM for the year 2012 from which we calculate the direct, indirect, and induced impacts of the renewal Plan. Through this analysis it is possible to establish the relationship between the neighborhood’s productive sectors, factors and institutions. Consequently, it is feasible to quantify the effect that the renovation Plan would have on production, wages, income distribution, employment, among other economic variables.

The multipliers analysis and the preliminary evidence suggests that the Plan will have positive impacts in terms of employment in certain sectors, commercial activity in the zone, living costs of residents, income distribution, among others. The project is also expected to generate a gentrification process and one of its main consequences is the displacement of the poorest population, as a consequence of the increase in living costs. All this expectation suggests that the project will generate positive changes in welfare for certain groups, like business owners. Employment in the education, transportation, and lodging services is expected to increase, while sectors like manufacturing are expected to show decreases in their levels of employment.

This type of studies are an important tool for decision making, particularly in the case of urban renewal projects, as they reveal the costs and benefits associated with this sort of interventions. Gentrification processes are complicated phenomenon to understand, using a SAM-based multiplier analysis enables us to get a more detailed picture of the potential gains and losses associated with this social transformation processes. Policy makers in the urban planning arena should introduce these sort of tools in order to make more informative decisions.
References


Abstract Index #: 62
THE PROCESS OF BUILDING RESILIENT REGIONAL ECONOMY
Abstract System ID#: 1313
Individual Paper

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Various national and regional socioeconomic shocks such as recessions can affect the stability of regional economies. Still, regions react in diverse ways to the same forces; some recover slowly despite being less affected while others recover rapidly despite being heavily impacted. Academics and policy makers have long sought to discover how some regions are able to mitigate negative impacts while others are less resilient. Indeed, planning for resilience has become a hot topic in policy-making. Current Employment Statistics (CES) State and Area Estimates illustrate how individual Metropolitan Statistical Areas (MSAs) in the United States maintained economic activity throughout the downturn over the past three decades. The Seattle-Tacoma-Bellevue, WA MSA is the only metro area with a population of 800,000 or more that achieved significant employment growth and mustered stable employment: Plus when it did suffer downturns, it recovered quickly from them from 1980 to 2014. Despite a similar size, the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA was adversely affected and surprisingly so. It experienced marginal growth with significant fluctuations and displayed a general inability to recover quickly from downturns.

This study extends prior research in which we identify and investigate the degree of influence of an array of demographic and socioeconomic correlates to growth, instability, and resilience in all US MSAs over the past three decades. Here, we probe more deeply for causal processes that may have been unwittingly masked in the course of statistical analyses. We do so by exploring two distinct MSAs: Seattle-Tacoma-Bellevue, WA and Philadelphia-Camden-Wilmington, PA-NJ-DE-MD. The exploration starts where the broader analysis left off, with a deep examination of pertinent local-area socioeconomic, demographic, and government expenditure data to obtain a better grasp of the socioeconomic dynamics of the two MSAs. This examination reveals historical changes in resident characteristics, industrial structure, and relationship with neighboring regions, which explains how the MSA arrived at its current economic position. We also investigate archival documents of the state and local legislatures pertaining to economic policies to get a sense of the intentions of the local political economies. Subsequently we perform a set of semi-structured interviews with local professors of the two economies, as well as with government officials who direct employment-related departments, mangers of personnel divisions and government liaison groups of major local employers, and representatives of relevant nonprofit organizations that focus public policy and economic development. The idea behind these interviews is to uncover more detail on (1) the importance to local economic development of key players including individual and institutions, (2) the effectiveness and bureaucratic nature of the local policymaking as well as of the processes of implementing policies, and (3) the perceived extent of inter-institutional collaboration and/or distrust. Our findings demonstrate importance of the roles of government at large, particular politicians, firms, and other nongovernmental organizations in policymaking and implementation. In turn, we discover how the roles and
capacities of these different agencies processes are perceived to affect the corresponding MSA’s growth, stability, and adaptability to ever-changing external forces.

Existing studies on economic growth and stability have centered on a purely quantitative examination of many geographic entities. Studies on resilience have not emerged until recently; thus, attempts to examine planning processes for resilient regional economic growth are rare and brief if they exist at all. Therefore, we provide an in-depth comparative analysis of two cases to suggest specific strategies that a region may adopt in order to lead its economy to grow steadily, stably, and resiliently. Furthermore, the use of various planning tools in unveiling the underlying relationships between correlates and effects enables practical suggestions for policymakers and regional officials.

References

Track 3: Environmental Planning and Resource Management

Abstract Index #: 63

USING GREEN INFRASTRUCTURE FOR STORMWATER MANAGEMENT

Abstract System ID#: 45
Pre-organized Session: Using Green Infrastructure for Stormwater Management

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More than 770 US cities have combined storm and sanitary sewers. Separating these sewers would be cost prohibitive; yet, combined sewer overflows are a major cause of water pollution in urban areas.

Several cities are using green infrastructure to manage stormwater in an attempt to improve water quality, reduce combined sewer overflow events, and comply with EPA mandates under the Clean Water Act.

This paper provides an overview of Philadelphia's historic Long Term Control Plan Consent Decree with EPA which features the use of green infrastructure to reduce stormwater runoff and Combined Sewer Overflow events.

EPA is requiring Philadelphia to "green up" 10,000 acres by 2035. Philadelphia expects to green up half of these acres through subdivision regulations which require new developments and major renovations to retain the first inch of rain in a 24-hour storm. The other half will mainly depend on getting landowners to green up their properties.

Philadelphia imposes has a stormwater utility fee on all properties based on impervious surface. The expectation is that the fee will create an incentive for property owners to green up their properties and hence reduce the stormwater fee. The city also has a tree planting program, and gives out free trees to property owners.
But other cities are using other approaches to stormwater management that Philadelphia may benefit from employing.

This paper analyzes Philadelphia’s stormwater control efforts and compares them to stormwater programs in Washington, DC and Prince George’s County, MD.

Note: There are three papers proposed for this session: This one (Prof. Tom Daniels) Prof. Amy Lynch of Ohio University; and Theo Lim, Ph.D. candidate in City and Regional Planning at the University of Pennsylvania

References

Abstract Index #: 64

COMPASSION BUILDING PRACTICES TO IMPROVE HAZARD MITIGATION AND CLIMATE ADAPTATION PLANNING

Abstract System ID#: 54

Individual Paper

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Widespread failure to realize national visions of sustainable and resilient hazard mitigation and climate change adaptation is due in large part to reactive and narrowly focused local planning and implementation (c.f. Burby 1998, Berke and Lyles 2013). Local decision makers typically promote economic development and private property rights while marginalizing the reduction of suffering, property damage, and ecological degradation. Insufficient local commitment to risk reduction, especially for using land use approaches to steer development out of hazardous areas, is a critical barrier to long-term risk reduction. External factors like national or state policy mandates and the opening of post-disaster windows of opportunity can influence local commitment, but mandates often lead to pro-forma local planning that meets minimum requirements and windows of opportunity are often ephemeral. Comparatively little knowledge exists of how to proactively build local commitment to risk reduction in pre-event planning without relying on major external or post-disaster natural, political, or socio-economic pressures.

Substantial political-economic forces result in the prioritization at the local level of land development for private gain (Logan and Molotch 2007). Building proactive local commitment to risk reduction likely will require balancing underlying norms of economic development and property rights more equally with compassion-oriented norms aimed at reducing and preventing suffering. Changing strongly held norms is difficult and slow, but norms can shape where information is obtained, how information is processed, and how decisions are made. My central research questions are: Do Compassion Building Practices (CBPs) hold the promise to change norms in risk reduction planning processes? If yes, how can CBPs be categorized, measured, and tested?

CBPs are defined here as 1) mindfulness programs developed and empirically validated in the medical, neuroscience, psychological and related fields as promoting positive emotions and compassion (c.f. Fredrickson et al. 2008 and Flook et al 2015) and 2) modifications to existing planning tools and techniques to build on and enhance existing norms of compassion. To date, little research has investigated whether CBPs can be used to 1) strengthen the individual commitment of local officials and stakeholders to risk reduction, 2) enhance shared understandings and commitments between stakeholders in risk reduction planning networks, and 3) generate plans and implementation measures that prioritize reducing suffering for those most vulnerable to hazard risks. This combination of outputs holds the potential to help reduce long-term loss of life, injuries, property damage, and environmental degradation.
This paper presents a conceptual framework for integrating CBPs into risk reduction planning. It draws on literatures related to: 1) natural hazards and climate impacts risk reduction 2) participatory planning processes and evaluation, and 3) mindfulness and compassion. It presents a typology of CBPs that planners can employ and identifies a set of relationships between CBPs and other planning characteristics that researchers need to empirically test.

References

URBAN HEAT ISLANDS AND URBAN HETEROGENEITY IN INDIANAPOLIS, IN: WHO IS OUR MOST VULNERABLE NEIGHBORS?

Despite the differences in regional climates, the Urban Heat Islands (UHIs) phenomenon has been addressed as a common environmental problem in urban areas, since UHIs occur as a result of land cover transformations, mainly the replacement of natural vegetation and agricultural lands by impervious surfaces which is associated with urban land uses. As UHIs are mainly caused by physical changes of the urban environment, previous UHI researches have traditionally focused on the causal relationships between physical land surface characteristics of urban areas such as land cover patterns, the vegetation indices and UHIs. However, as in the earlier study of Eliasson (2000) in Landscape and Urban Planning addressed, urban planners were interested in climate aspects but climate knowledge had low impact on planning process. It is somewhat due to the lack of researches focused more on the relationships between UHIs and socioeconomic, and demographic characteristics of urban areas. This research tried to fill this gap. The goal of this research is to provide urban planners further understandings about socioeconomic and demographic influences of UHIs. With the summertime surface temperatures of Indianapolis, Indiana, which is calculated using the thermal band of Landsat 7 ETM+ image, and other variables that explains physical environmental characteristics as well as socioeconomic and demographic characteristics of study area, this study tried to link the spatial patterns of summertime surface temperatures to urban open spaces, socioeconomic, and demographic patterns. This study hypothesized; 1) urban open space may work as a cooling agent in urban area, 2) racial and ethnic minority populations may be more vulnerable to UHIs, 3) low income populations may be more vulnerable to UHIs, and 4) above mentioned groups of vulnerable populations may tend to live in the areas with less open spaces. Relationships between summertime surface temperature, urban open space, surface characteristics, socioeconomic and demographic variables were investigated using traditional multiple ordinary least squares (OLS) regression as well as Geographically Weighted Regression (GWR) method. Since GWR framework allows local rather than global parameters estimation, GWR parameter estimates were expected to provide more regional and neighborhood specific explanations of UHI effects. The objectives of this study are twofold; 1) to quantify the magnitude of surface temperature variations in Indianapolis, IN, and 2) to explore the biophysical, socioeconomic and demographic factors that are responsible for the UHIs in the same area.
This study tried to correlate variations in the UHI with physical, socioeconomic and demographic characteristics of neighborhoods in order to determine differences in exposure to high temperatures. The results of this study will promote the awareness of UHIs to urban planners, diagnose current status of neighborhood, as well as provide more proactive guidelines for urban planners.

References


Abstract Index #: 66
GREEN INFRASTRUCTURE INVESTMENT: THE ROLES OF COMMUNITY CONTEXT AND CAPACITY
Abstract System ID#: 75
Individual Paper

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This paper presents the results of research funded through an EPA STAR grant focused on assessing Philadelphia’s Green Infrastructure (GI) program. This aspect of the four year interdisciplinary research project seeks to understand the distribution of public and private sector investments in GI projects across the diversity of neighborhoods with respect to indicators of community context and capacity. Where context is defined as characteristics that inhibit and capacity as factors that facilitate collaboration within communities and with external partners. Community context and capacity are deemed integral to the success of the Philadelphia GI program as the Philadelphia Water Department is relying upon collaborative approaches to facilitate the voluntary implementation of GI practices on publically and privately owned lands. The Philadelphia Water Department identified nine collaborative approaches (Green Streets, Green Schools, Green Public Facilities, Green Public Open Spaces, Green Industry, Institutions, Commerce and Business; Green Driveways; Alleys and Green Parking, and Green Homes) in its Long Term Control Plan Update (Philadelphia Water Department 2009).

Private sector investments in GI mandated by stormwater regulations for new construction and major rehabilitation also are assessed in relation to these two sets of indicators.

The research design seeks to assess two central hypotheses: public sector collaborative approaches to implement GI programs can result in inequitable distribution of GI practices related to each community’s context and capacity to be an effective partner. Private sector investments in GI resulting from regulatory compliance are influenced by market preference to avoid high risk communities resulting in disproportionate investment patterns that favor low context and high capacity neighborhoods.

The research employs a GIS-based model and statistical analysis to assess the distribution of GI practices in relation to indicators of community context and capacity. Generally available demographic data was used by the researchers to develop indices of community context and capacity using variables identified in the planning and community development literature (Foster-Fishman et al 2007; Emery and Flora, 2006; and Chaskin, 2001). Data
for the location of GI projects implemented by the public and private sectors were provided by the Philadelphia Water Department.

Final results will be available in time for a conference presentation. Results for voluntary collaborative investments are inconclusive at this time. Preliminary results based on incomplete GI project data indicate a positive correlation between mandatory private sector investment and community capacity. While preliminary, this result supports the second research hypothesis and suggest there is a need to alter the current policy to achieve a more balanced pattern of investment.

References


Abstract Index #: 67

SEEING THE CITY FOR THE TREES: PUBLIC SPACE, CLIMATE ADAPTATION, AND ENVIRONMENTAL JUSTICE IN LA AND NEW YORK’S “MILLION TREES” CAMPAIGNS

Abstract System ID#: 94

Individual Paper

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In U.S. cities, low-income minority neighborhoods are tree-poor. Because trees make streets measurably cooler, this disparity increasingly impacts residents’ health as climate change magnifies the urban heat island effect. In 2007, both Los Angeles and New York committed to planting a million trees in partnership with public agencies, private donors, non-profits, and property owners. Moreover, both Million Trees LA (MTLA) and MillionTreesNYC (MTNYC) prioritized low-canopy neighborhoods. In this paper, I propose to present preliminary results from my dissertation, which measures each public-private partnership’s success in increasing tree canopy in low-canopy neighborhoods, while analyzing how the distribution of public and private space shaped what could be planted where.

Previous research on public-private partnerships has demonstrated that their social equity goals are harder to achieve when there is a lack of public funds. My dissertation goes a step further by examining whether equity is harder to achieve when there is a lack of public space. For instance, Million Trees is relatively free to plant in public parks, squares, and streets. In contrast, private property requires the permission of the owner, who may be more responsive to market forces than public goods such as environmental justice and climate adaptation. Therefore, I hypothesize that the city whose past development favored public over private space was more successful in reducing tree cover inequality.

Different layouts and street and subdivision standards apportion different amounts of space to different uses, shaping public versus private control. Such differences accumulate over time, producing disparities between cities, as well as between affluent and low-income neighborhoods. The distribution of public and private property is likely to differ substantially between New York and Los Angeles, making these cities ideal case studies. The former enjoys an abundance of historic public parks, squares, and pedestrian streets, while the latter’s car-dependency has discouraged the development of these traditional public spaces. Moreover, within each city,
low-income neighborhoods have historically received lower levels of public investment in parks and other amenities. Therefore, within each city, the proportion of public space is likely to be lower in low-income areas.

Using tree planting records, tax parcel records, and remote sensing data, I will assess the environmental justice outcomes of MTLA and MTNYC from the start of the program in 2007 to the present. Specifically, I will quantify the extent to which each program planted trees and expanded tree canopy in low-income, low-canopy neighborhoods relative to the rest of the city, as well as the proportion of plantable permeable surface available (and used) on public versus private property. To trace how past development distributed public and private space with respect to changing local populations, I will visually analyze aerial surveys at ten-year intervals from 1970 to the present, in conjunction with spatially referenced historical census data. (Because visual analysis is detailed and labor-intensive, I will select two extreme nested case studies from each city: the census tracts with the lowest and highest number of trees planted by Million Trees, normalized by area.) This historical analysis will shed light on how past changes in the built environment shaped what was possible with Million Trees, as well as the broader relationship between public space, environmental justice, and climate adaptation.

References


Abstract Index #: 68
ENVIRONMENTAL AWARENESS AND CONSUMPTION PATTERNS AMONG DIRECT ECOSYSTEM SERVICE USERS IN AN URBAN TROPICAL WATERSHED

Abstract System ID#: 96
Individual Paper

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During the second half of the 20th century, Puerto Rico’s coastal population grew rapidly, slowing down or reversing forest restoration cover along the island’s coastal lowlands, and resulting in the degradation of groundwater and surface water resources. Coastal natural resources were thus adversely affected (Barreto, 1997). Population growth was accompanied by a less stringent enforcement of environmental laws compared to those of the U.S. mainland (Berman-Santana, 1996). Due to its urban nature and rapid population growth, the Manatí watershed is a location where ecosystem service degradation is evident. Its associated ecosystems have been impacted by coastal development, eutrophication, and debris disposal for decades but there have been minimal attempts to conduct formal studies of human impacts.

The proposed research will explore environmental consciousness and lifestyles among the population benefiting directly from ecosystem services in the Manatí watershed. We will use currently established measures of environmental consciousness (Hedlund-de Witt, Boer, and Boersema 2014; Jiménez and Lafuente 2010) as well as methods for the measurement of materialism and materialistic values (Hurst, Dittmar, Bond and Kasser 2013). We will ensure that all used measures are appropriate for the local cultural context.
We will use a stratified sample with a convenience component to conduct interviews in three watershed sites. Conducting interviews in situ allows us to ensure respondents are familiar with the ecosystem services they describe and value. Three one-kilometer circles will be defined upstream, midstream and downstream. Our aim is to conduct a minimum of 100 in-person interviews. We will associate consumption patterns and environmental consciousness with the delivery of direct ecosystem services, placing emphasis on behavioral recreation patterns observed in situ. We expect to find lower consumption patterns and higher consciousness of environmental issues among those directly benefiting from recreation ecosystem services. Associating environmental awareness and consumption profiles with the delivery of ecosystem services would inform current environmental and planning education curricula from an ecosystem service perspective and inform key public policy on watershed management and regional sustainable practices.

References

Abstract Index #: 69
TALKING GREEN: FROM OZ TO OZ
Individual Paper

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This paper is an extension of Talking Green in Red States: Stories from the Great Plains (Gibson et al., 2014) that examined the communication strategies of planners involved in sustainabilty planning initiatives in the U.S. Great Plains. We expand these narratives beyond the Great Plains to Queensland, Australia by interviewing planners about their experiences when communicating and deliberating about issues of sustainability. Using a semi-formal structure, interviews are conducted as casual “coffee talks” (Maynard-Moody & Musheno, 2003). Together, these collected stories help us to understand how planners are “talking green” in conservative political atmospheres, across vastly differing geographies using an international comparative framework described by Reimer et al. (2014).

The paper presents comparisons between the collected narratives, concerning similarities and differences in regard to the nuances of sustainability planning dialog. We relate the lessons learned about communication strategies of planners working in sustainability in Kansas and Queensland to the broader discourse of planning and politics, communicative planning and planning as storytelling, as they relate to sustainability planning in challenging situations.

References
CLIMATE JUSTICE AND IMPLICATIONS IN CLIMATE CHANGE ADAPTATION PLANNING FOR THE HURON RIVER WATERSHED, MICHIGAN

Abstract System ID#: 105
Individual Paper

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Climate change-induced environmental hazards refer to hazards (e.g., floods, droughts, extreme heat) that are aggravated by climate change impacts in terms of their frequency, intensity, and geographical spread (IPCC 2014). Socially vulnerable groups—the elderly, children, women, migrants, non-whites, and the poor—are likely to be impacted most as a result of unequal capacity in coping with disasters (Cutter et al. 2003). In the past three years, the Huron River Watershed Council has been working with communities to provide actionable plans with high priority climate change adaptation strategies to decision-makers in the watershed to improve resilience of water resource sectors and their communities to climate change.

Climate Justice research applies an environmental justice framework to examine the racial and socioeconomic disparities in people’s livelihood affected by climate change. The field of environmental justice has explored the relationship between environmental quality and socioeconomic indicators such as influence of race on the siting of toxic and waste facilities (Saha and Mohai 2005). Several efforts are currently underway to develop environmental justice indices, most prominently by the U.S. EPA (U.S. EPA 2014). Such indices have tended to include measures of potential environmental exposures at the census tract or zip code levels using publicly available databases, such as the Toxic Release Inventory. However, no index to-date has taken into account the anticipated impacts through empirical modeling of climate change on both local hydrology and populations. This paper investigates empirical evidence for Climate Justice in the Huron River watershed with inputs from the Huron River Watershed Council in order to provide a place-based assessment and information to sector teams that will inform priority actions on climate change adaptation for watershed communities.

The Huron River watershed drains 2530 km² and contains a population of 500,000 residents in 65 municipalities, including major cities such as Ann Arbor and Ypsilanti, Michigan, with diverse population along the mainstream. A Climate Justice Index that reflects socioeconomic impacts of climate change in freshwater resources is developed through syntheses of a hydrological model that examines climate change impacts on flooding hazards, an environmental hazard index that includes locations of toxic and waste facilities with potential to impede water quality, and a social vulnerability index that includes socioeconomic factors related to disasters.

Climate Justice hotspots are identified through spatial analyses and statistical methods for further spatial planning efforts for climate change. The findings facilitate development of planning strategies for prioritizing resources in areas with the greatest social needs when planning for future water resources management and community development in consideration of climate change impacts. This paper expands existing freshwater resource research in the Great Lakes to include the aspect of Climate Justice. In addition, the integration of stakeholders input in the process of scientific research demonstrated in this study serves as a transdisciplinary planning framework for local climate change planning efforts in other communities.
In 2009, the U.S. federal government devised a national sustainable development agenda through the formation of the Partnership for Sustainable Communities (Partnership), between the U.S Departments of Housing and Urban Development and Transportation, and the Environmental Protection Agency. The Partnership defined its vision of sustainable development through six Livability Principles for policy and program guidance, and allocated grants to communities across the U.S. for projects furthering this agenda. However, the Partnership lacked an evaluation tool allowing participating entities at various levels to assess progress effectively and inform policymakers and the public about sustainable development. Consequently, many organizations, municipalities, states, advocacy groups, and private corporations undertook their own sustainable development assessments. However, their conceptual framing and definitions ranged widely, with some emphasizing the environment and others giving weight to other factors (Epstein 2008, ICLEI 2009, Lynch 2011).

To remedy this gap, a team of planning scholars, in collaboration with the Partnership, developed the Sustainable Communities Indicator Catalog (SCIC), a web-based tool that enables communities to benchmark and track their progress toward sustainable urban development. The researchers crowd-sourced build-environment-oriented indicators from communities around the U.S., while incorporating the latest research on these indicators’ effectiveness. The SCIC was launched in September 2014. It consists of a set of 30 priority indicators, spanning housing, land use and transportation, scalable to communities of varying sizes and goals. Its searchable database allows communities to select indicators appropriate to their projects and desired outcomes, making it highly customizable. The SCIC also describes how each indicator relates to sustainability, offering instruction on its use and interpretation, and providing examples of its use in U.S. cities. This flexible approach, with a built-environment focus, stands in contrast with a comprehensive, high-level, globally-relevant and comparable standard that ISO recently developed, “Sustainable development of communities - Indicators for city services and quality of life” (International Standard Organization 2014).

This poster will present a dual assessment of the SCIC, answering the following questions: How does crowd-sourcing for sustainable urban development indicators satisfy the diverse needs of communities with regard to sustainable objectives stemming from the Livability Principles? How and to what extent is a resource like the SCIC useful to planners?

To address the first question, we performed a quantitative analysis of 400 crowd-sourced indicators to analyze how well they covered the different areas of sustainable urban development, defined on the basis of the
Livability Principles. Our findings suggest that while communities receive useful information from a crowd-sourced pool, this process has serious limits, particularly with the over-emphasis of certain specific goals (e.g. tree planting) and under-emphasis of fundamental ones (economic development and equity). Expert groups consulted during the process required modifications to the crowd-sourced indicators, emphasizing in particular equity as a fundamental element of sustainable urban development.

In order to test the SCIC usefulness, the team also conducted an online survey of planners and other public officials throughout the U.S. The survey sample consists of the Partnership’s grantees, and represents the perspective of cities, counties and regional organizations of various sizes, to ensure that the SCIC serves all types of potential users. The questionnaire elicits feedback on how well the SCIC helps users to calculate indicators, find measures that are relevant to their community, and generally track progress toward sustainable communities. Preliminary results show general user satisfaction with the SCIC across the board, regardless of community size or location across the country, which suggests that this tool can help planners to track sustainable urban development.

References


Abstract Index #: 72

GREEN INFRASTRUCTURE AND ITS POTENTIAL FOR REDUCING FLOODING IN THE HOUSTON METROPOLITAN AREA: A PRELIMINARY ASSESSMENT

Abstract System ID#: 113
Individual Paper

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The benefit of green infrastructure has become an emerging topic of study and its potential use as a hazard mitigation tool is receiving more attention in the urban planning discipline. However, there are few studies that have directly assessed specific dimensions of green infrastructure and the balance between green infrastructure and urban development for enhancing community resilience particularly within highly developed urban areas. To date green infrastructure has been studied mainly at the community scale, utilizing very coarse measurements and at the site scale using very site-specific details and characteristics. What has been missing is a more broadly based assessment employing refined measures that will allow for the examination of the particular forms and place-specific integration of green infrastructure at the community-wide level of implementation (Young, 2011). For example, previous research has considered pervious surfaces, such as different types of wetlands and undeveloped land use/land cover, to examine the impact on flood losses (Brody, Blessing, Sebastian, & Bedient, 2013; Brody, Peacock, & Gunn, 2012). Additionally, the adverse hazard impacts from rapid urban development have been studied, specifically the effects of urbanization on runoff and impacts of development patterns on flooding (Brody, Kim, & Gunn, 2013; Olivera & DeFee, 2007). However, the consequences of specific green infrastructure patterns and forms within urban area for flooding has not been studied.

This study will seek to further the research on green infrastructure for flooding hazards over a 6-year period from 2004 to 2010 for Houston Texas Metropolitan area (1) identifying the amount of the distributed green infrastructure, (2) categorizing different types of green infrastructure, (3) developing measures for the actual forms, types, and placement of green infrastructure, and (4) assess the effectiveness of green infrastructure for reducing runoff as assessed using stream flow gauge data. More specifically, in order to understand its potential
effectiveness for moderating the adverse impacts of flooding, a spatial assessment of green infrastructure (amount, continuity, and connectivity) at the near neighborhood scale will be developed. The consequences of these green infrastructure spatial measures for streamflow gage data will be assessed.

To undertake this study we will utilize here-to-for unutilized data to assess green infrastructure at an exceptionally high resolution in urban areas. Conventional approaches utilized the National Land Cover Database (NLCD), Coastal Change Analysis Program (C-CAP) Land Cover data, which are at a 30 by 30 meter resolution. This study will utilize satellite imagery data produced by the National Agriculture Imagery Program (NAIP) to compute a Normalized Difference Vegetation Index (NDVI) that will provide 1-meter resolution imagery enabling highly detailed measures of green infrastructure, particularly within complex urban environments. Hence, this study will present a novel approach for assessing green infrastructure and to utilize these new assessments to develop measurements of green infrastructure form. Our results are also expected to provide a better understanding of the consequences of green infrastructure integration on the reduction of urban flood hazards. Furthermore, the findings will provide additional decision support tools and options for promoting flood mitigation for urban planners, policy makers, and community residents as they evaluate existing green infrastructure in communities and make decisions regarding the implementation of green infrastructure to mitigate flood damages and to enhance community resilience.

References


Abstract Index #: 73
PERCEIVED BARRIERS AND BENEFITS OF GREEN STORMWATER INFRASTRUCTURE AMONG NON-RESIDENTIAL PROPERTY OWNERS
Abstract System ID#: 114
Pre-organized Session: Using Green Infrastructure for Stormwater Management

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A number of U.S. cities have recently sought to engage property owners in the development and management of the green stormwater infrastructure (GSI) through two approaches, market-based mechanisms and public education programs. Market-based mechanisms assume that a combination of economic incentives such as stormwater fees, credits and/or grants can stimulate the implementation of GSI. Public education programs focus on shifting people’s preferences, perceived costs, and moral benefits – often referred to as non-price incentives – in order to change their behavior.

The perspective of existing literature on GSI adoption raises four key issues. First, existing literature has studied barriers to engaging the private sector from the perspective of policymakers and private agencies. However, perceptions of property owners on the barriers and benefits of implementing GSI may be very different, changing expected effectiveness of programs. Second, many of the studies of property owner perceptions focus on residential households and rarely address non-residential property owners. Third, investing and installing GSI may require complex decision-making processes with many physical, technical, environmental, economic, and legal aspects. Fourth – and affecting all of the previous issues – property owners may be highly heterogeneous in their perceptions, motivations, and capabilities.
This paper attempts to identify perceived barriers among non-residential property owners in the implementation of GSI, including the key technical, perceptual, physical, and economic factors that can enable (or hinder) its implementation. Our study area is the City of Philadelphia, a leader in GSI practices among U.S. cities. Philadelphia’s Long Term Control Plan (2011) calls for the investment of at least $1.67 billion of public funds in green infrastructure, and uses both economic incentive programs and public outreach methods in order to encourage non-residential customers to invest in and install GSI. However, to date the response among these non-residential customers has been very limited.

This paper deploys survey questionnaires to measure property owners’ stormwater knowledge, environmental attitudes, perceived barriers and benefits and intention of installing GSI among four different groups with varying knowledge and levels of engagement to date. Within each group, five non-residential property types are included, i.e. non-profits, business, industry, education, and apartments.

Our hypotheses are that: (1) some of these groups value social and environmental criteria over economic considerations, while others instead focus on the economic cost of GSI; (2) the intention to install GSI can be enhanced by economic incentive programs and/or public outreach, and (3) these programs will work differently among the differently-motivated groups.

Results will be presented in the full paper upon completion of the data collection and analysis this summer.

Abstract Index #: 74

Happiness as an Element of Planning for Sustainability - Lessons from the Seattle Area Happiness Initiative

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The human dimension of sustainability – the balance of planet, people and prosperity – importantly includes wellbeing that is a means to the end of happiness. Pursuit of happiness is an important feature of founding documents for the United States. This paper explores what we think that we know about happiness, and possible roles of urban planning in fostering happiness of a city’s residents and visitors.

Developments in positive psychology over the last two decades provide a basis for this inquiry and focus on two selected sets of factors. The first are those that contribute to happiness throughout life including health, arts and culture, environment, and community (Layard, 2005; Hothi, 2008; OECD, 2009). The second are factors that affect happiness at various life stages including during childhood, youth and education, working years, and older age (Diener, 2004; Blanchflower, 2008). Thus a number of drivers of happiness and wellbeing are identified and differ in their influence depending on stage of life and life situation. These inform developing happiness domains and some appropriate measures for assessing them (GfK NOP, 2005).

A second focus of this paper is on the Seattle Area Happiness Initiative in Seattle, Washington. This recent non-governmental program, begun by Sustainable Seattle, is inspired by the earlier effort in Bhutan to replace or augment Gross Domestic Product with measurement and attention to the Gross Domestic Happiness. This case is chosen because it is widely regarded as the first such program in the US, and because the author of this paper has been a participant observer since its beginning in 2011. A description of the procedure used and a critical assessment of the results of this procedure can be of value to other initiatives that similarly seek to address this subject.

Finally this paper addresses urban planning applications of happiness research and the results of the Seattle initiative (Bacon, 2010). The categories of life domains and factors affecting happiness presented earlier provide a framework for identifying how planning interventions can support and enhance the happiness of those
inhabiting cities. Accounting for this in designing planning programs and proposals can add to their effectiveness and popular support (Frey, 2011).

References

Abstract Index #: 75
MEASURING THE EFFECT OF THE FEMA COMMUNITY RATING SYSTEM PROGRAM ON FLOOD LOSSES ACROSS THE UNITED STATES
Abstract System ID#: 147
Individual Paper

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Increasing physical risk coupled with development in flood-prone areas has amplified the adverse economic and human impacts of floods in recent years. Losses over time stem from repetitive and chronic events punctuated by major storms, such as Hurricanes Sandy, Ike, Katrina, and Rita (to name a few). In response to mounting flood losses, planning researchers have proposed various non-structural techniques as segues to facilitating more resilient communities. Most of this research is based on qualitative case studies or limited geographic scopes.

To address the lack of comprehensive knowledge about the effectiveness of flood planning strategies, our research quantitatively evaluates, as a proxy, the ability of FEMA’s Community Rating System (CRS) to reducing losses from floods across the U.S. In an effort to counter mounting flood losses, FEMA introduced the Community Rating System (CRS) in 1990 as a way to incentivize local jurisdictions to exceed the existing National Flood Insurance Program’s (NFIP) minimum standard for floodplain management and implement non-structural planning techniques in an effort to promote the development of more flood-resilient communities. The program has expanded greatly since its inception and now includes over 1,200 participating communities representing majority of all NFIP policies. Flood mitigation activities under this program include education programs, land acquisition and protection, storm-water reduction techniques, and the adoption of local flood management plans. While the CRS offers promise for reducing flood losses and facilitating the development of more resilient communities, the program has never been evaluated at a national scale.

Using observation data and advanced quasi-experimental research methods, we conduct a comprehensive, nationwide analysis of the role the CRS plays in reducing the adverse impacts from floods and estimate the amount of dollars saved by implementing flood-planning activities at the local level. This study was conducted in two phases. First, based on a nationwide sample, we compare how insured flood losses in CRS participating communities compare with losses in non-CRS communities. Results provide a comprehensive understanding of the effectiveness of the CRS program as a whole in achieving its primary goal. Second, we select 450 CRS-participating communities as a nationally representative sample with which to statistically assess the performance of specific CRS activities and their elements. Through this research approach, we are able to identify the CRS activities/elements that have the greatest effect on reducing property damage caused by floods and quantify in dollar amounts their expected savings. Overall, our findings provide scientific evidence on the performance of flood planning measures and lend guidance to local planners on which types of mitigation techniques are most effective in reducing flood losses over the long term.
References


Abstract Index #: 76

INCORPORATING VALUES INTO STREAM RESTORATION AGENDA SETTING: LEARNING FROM ANYANG STREAM, KOREA CASE STUDY

Abstract System ID#: 153
Individual Paper

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Decision-makers of stream restoration (SR) cases tend to consider primarily the scientific methods and knowledge, namely the advice of hydraulic engineers (Palmer et al., 2005; Lave et al., 2012). In particular, social factors such as culture and history are neglected. The resulting stream restoration may not be effective because the process reflects and indicates only one side of scientific improvement of the stream, and the projects experience conflicts due to the disharmony among the diverse interests, including scientific and social factors. This research addresses how and to what extent the participatory decision making processes incorporate different values and visions of the stakeholders with Anyang Stream, Korea (Wang & He, 2010) as a case study by analyzing personal priority of stakeholders with the Analytic Hierarchy Process (AHP) (DeSteiguer, 2003). The relevant data on stream restoration has been collected through semi-structured interviews, observations at the collaborative meetings and workshops with the stakeholders, and documentation review.

My research first implements the AHP in order to research the case of Anyang Stream, Korea. By using the AHP, this research will examine the hypotheses below:

Hypothesis 1: Conflicts in stream restoration emerge from contradictions between diverse interests. The stakeholders in stream restoration collaborative groups tend to argue with other groups who interpret professional/scientific knowledge from different perspectives.
Hypothesis 2: Participants think that water quality evaluated by scientific indicators will be most important factor for decision-making, among diverse interests on the SR.

Anyang Stream, Korea is a great example of integrated basin management for the purpose of water conservation. It is the largest lake in Korea and has a long history of social conflict related to natural disasters such as flooding and water pollution issues in the community. During the industrial development of Anyang Stream, Korea provided water resources for people and societies. Due to the transformative effects of the industrialization period, a restoration of the lake became a serious environmental issue, generating conflict between citizen groups and governments (Bamba, 2011).

I will conduct both qualitative and quantitative analyses based upon the AHP method. From the gathered information, understanding social and ecological systems will assist illuminating why environmental engineers...
and scientists have been the main decision makers in stream restoration and provide potential recommendations for mitigating the shortcomings of lopsided stream restoration.

In order to collect relevant data, semi-structured personal interviews with participants representing each stakeholder group, as well as with scholars in the field of stream restoration, will be conducted. Most importantly, the final documents issued by the local governments as well as interview scripts will undergo qualitative (content) analyses. Also, the AHP method will be used for ranking interests of each participant. To analyze plan outcomes and citizen participation, the final governmental White Papers will be reviewed and excerpted from the original copies at the public libraries in the Shiga Prefecture.

I carefully expect that my research outcome reflects that scientific factors are still the most significant factor to be considered in SR and stakeholders who believe in scientific improvement in SR are still a powerful and influential decision maker. At the same time, my research will be able to propose a potential solution of participatory stream restoration, which existing scientific and technology oriented SR cannot provide. Consequently, this research reaffirms the importance of collaboration and the collective contribution of academic researchers, civil administrators, and the individual participants of interest groups in fostering active communication among different values for applying sustainability in stream restoration.

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demonstrate the built environment sectors most responsive (waste, residential, land-use change, and forestry) and least responsive (transportation) to GHG reduction policies without import substitution.

A comparison amongst case-study countries and theoretical models indicates the most feasible opportunities for successfully targeting GHG reductions in America, with special attention to waste management, food planning from import substitution in the agricultural sector, and combined-heat-and-power (CHP) districts. Many of the theoretical methods first identified by Pacala and Socolow (2004) were borne out in the above case-study countries with varying degrees of success: from a general shift to natural gas and renewable energy over coal and oil, to across-the-board GHG reductions from biological storage in forests and agricultural soils. Other policy recommendations, such as reduced reliance on cars or carbon storage in hydrogen plants, were not meaningfully realized in any of the above countries, showing the lack of current feasibility. Contrary to popular policy recommendations, the transportation sector remains the least likely to achieve GHG reduction despite significant policy support and national funding programs to sway practice. Comparison with theoretical models suggests that planners and scholars could invest more time in assessing the outcomes of adapting successful, proven planning policies, such as citing waste-to-energy CHP plants. Indeed, actualizing nationally supported waste-to-energy policy will require extensive planning expertise at the neighborhood scale to ensure that unwanted land uses are not disproportionately located in poor or minority communities.

Moreover, the unifying feature of the countries that have achieved GHG emission reduction is a public commitment to the Kyoto Protocol. Many targets for future reduction in the case-study countries rely on national policies beyond the scope of the EU emissions trading program, showing country-level conviction in GHG-reducing policy. Having not ratified the Kyoto Protocol nor committed to domestic policies, political will remains that largest hurdle facing American environmental health policy and realizing economic growth decoupled from GHG emissions.

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organizing framework for urban ecological infrastructure to promote physical activity; and 2) on the municipal scale in its response to regulatory challenges and opportunities to affect change citywide.

Over the past decade, green infrastructure has emerged as a topic of significant interest in research for its potential to advance sustainable urban planning and design in terms of both ecological and human health. Competition for land resources has interrupted ecological patterns and processes, fragmenting urban open space and adversely impacting urban ecosystems (Benedict and McMahon 2006). Chronic health conditions caused in part by physical inactivity, such as diabetes and hypertension, have reached pandemic proportions (Kohl et al. 2012). Lack of connectivity and access to urban green space has intensified the problem (Sallis et al. 2006).

While multiple and differing definitions describe green infrastructure (Wright 2011), a core group of common planning principles has emerged: multifunctionality; connectivity; a multi-scale approach; and integrating knowledge across disciplines (Hansen and Pauleit 2014). Several theoretical models exist, but there is a lack of evidence to operationalize concepts and guide implementation at the municipal scale. To explore these issues, my study was comprised of three parts. Through a content analysis of Denver’s comprehensive plan and functional master plans for green infrastructure and parks I examined vertical and horizontal consistencies for policies advocating the core green infrastructure principles supportive of physical activity. Interviews with key participants documented the opportunities and challenges experienced through the existing frameworks of policy, disciplinary boundaries, and urban form. Critical to the inquiry was the review of project plans and field verification of as-built conditions in meeting stated goals and objectives. Identification of green infrastructure principles and implementation of best practices informed the potential for the project to serve as a catalyst to affect change citywide.

Results suggest strategies for incorporating physical activity were successfully implemented within the project, although the green infrastructure developed to support such activity did not consistently reflect best practices. Translating scale from municipal policy to project implementation presented multiple challenges, including regulatory agency resistance to innovative stormwater management practices, and reluctance to change maintenance operations to accommodate such practices. This inquiry is important to urban planners in its contribution to green infrastructure discourse—testing theoretical principles through the planning, design, and implementation of a built project within a normative framework.

References
The purpose of this study is to examine the possible interrelation between natural disaster damage and local socio-economic characteristics, and provide solution to expected problems if the mutual influence is overlooked within hazard research. To achieve these goals, a literature review with a new perspective and quantitative research using a two-stage least square (2SLS) model were conducted.

To date, hazard studies dealing with the relationship between disaster losses and local socio-economic features tend to focus on one of two areas: social vulnerability to disaster and negative impact of natural hazards on local circumstances. Studies related to the former have identified disparities in damage according to socio-economic status of the area (Mustafa, 2002; Pelling, 1997; Pelling 1998, Brody et al., 2010). These individual findings were integrated into the concept of social vulnerability, which is defined as “the set of characteristics of a group or individual in terms of their capacity to anticipate, cope with, resist and recover from the impact of a natural hazard” (Blaikie et al., 1994). Cutter et al. (2003) determined the geography of social vulnerability for all U.S. counties with indices including personal wealth, age, density of the built environment, single-sector economic dependence, housing stock and tenancy, races, ethnicities, occupation, and infrastructure dependence.

Meanwhile, the impact of a disaster on a local community has also been verified by several scholars. Quarantelli (1995) and Bolin and Stanford (1991) identified that natural disasters exacerbate urgent shelter requirements and shortages of low-income housing. Frey and Singer (2006) asserted that natural hazards cut off local communities and destroy residents’ social networks. French et al. (2010) established the concept of a model with four types of social and economic consequences that result from natural hazard events: Shelter and housing, economic losses including business interruption, health including casualties, and social disruption. In addition, it revealed that disaster damage lowers local tax income through a quantitative method.

Two strands of previous research have implied the existence of a relationship of mutual influence between local social vulnerability and disaster costs. For instance, while French et al. (2010) found that disaster damage had a negative impact on local finance, Brody et al. (2010) determined that the financial resources of local government can enhance its capacity to implement structural and non-structural hazard mitigation actions preventing damage. However, most studies related to natural hazards and local consequences presume a single direction of influence and do not consider any mutual effects, which creates a problem of endogeneity at the quantitative analysis stage. Endogeneity can arise when there is a correlation between a dependent variable and an independent variable, thus the model is decided in an interdependent way. This situation causes simultaneous equation bias, which then makes the estimator inaccurate; by destroying its unbiasedness and consistency. Therefore, endogeneity should be controlled in an adequate manner when quantitative analysis is used to identify the relationship between natural disaster costs and local socioeconomic characteristics.

In this context, this study adopted the 2SLS model to identify the degree of influence from local socio-economic features on disaster losses. 2SLS was used as an alternative methodology that can adjust for possible errors using instrument variables and can assure the estimation of more validated values. In addition, Hausman-Specification test was performed in order to grasp the existence of the endogeneity. Consequences of the analysis show corrected results and suggest implications about both methodology and policy making. It is expected that our findings can provide better ways to ascertain the connection between natural disaster damage and social vulnerability features, which can support more suitable decision-making within a local context.

References
HETEROGENEOUS REACTIONS TO PRICE INCENTIVES PROMOTING PRIVATE IMPLEMENTATION OF GREEN INFRASTRUCTURE

Abstract System ID#: 226
Pre-organized Session: Using Green Infrastructure for Stormwater Management

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One of the major remaining sources of water pollution in the U.S. is stormwater runoff, which occurs when precipitation is blocked from natural hydrological patterns and is instead converted mostly into surface flow. Recently, cities have begun exploring cost-effective alternatives to conventional drainage infrastructure through Green Stormwater infrastructure (GSI), but implementation of GSI on a large scale is still in its infancy.

A key question is how policies can be used to build distributed networks of GSI that achieve city-scale objectives. The planning literature has mainly focused on the environmental and community benefits of green infrastructure, and has focused less on how to encourage private owners’ adoption on a city-wide scale using pricing instruments. The economics literature has suggested that implementing Pigouvian tax-like pricing mechanisms, trading and credit systems could incentivize individual actors to reduce the generation of stormwater runoff from their properties, but is unable to address how to achieve particular spatial outcomes. This study builds on these two different literatures to study how pricing structures could be used to incentivize the adoption of cost-effective, GSI among targeted heterogeneous property owners and properties. Also, we seek to include factors that are not present in the Neo-classical economic model, including imperfect access to information and the role of targeted outreach programs, heterogeneous responses to pricing, and the role of organizational complexity in decision-making.

In this paper, we assemble parcel-level stormwater billing data for the City of Philadelphia before and after the onset of the change in stormwater fee billing method, and joined this with socio-demographic variables, property data, and neighborhood characteristics to evaluate property owners’ probability of applying for grants to build GSI on their properties. We then utilize logistic regression and stratified data to estimate the effects of program characteristics, parcel characteristics and neighborhood effects on the likelihood that a property owner will apply for a grant to build Green Stormwater Infrastructure on his own property.

Initial findings show that a high positive change in the stormwater fee did result in a property owner being more likely to apply for the grant. However, parcels that received water bills prior to the redistribution of stormwater fees were also more likely to apply for grant than were new customers who had never received a bill from the water department before the change in billing method. Lastly, based on the results of our model, we find that increasing the stormwater fee does not result in a linear probability of increase in grant applications, and that increased targeted outreach should be expected to have a larger effect.

Further results will be presented in the full paper.

EXPLORING THE RELATIONSHIP BETWEEN URBAN FORM AND ENERGY CONSUMPTION FROM A MULTI-SCALE PERSPECTIVE

Abstract System ID#: 273
Individual Paper
Urban form can be viewed from various geographic scales and classified into levels such as metropolitan area, city and neighborhood. Normative principles for measuring urban form need to be developed at multiple scales and carefully designed to address the different issues that arise at each scale. Meanwhile, urban energy consumption cut across sectors and disciplines, which complicates relative exploration on the relationship between urban form and energy consumption.

Comprehensive understanding of the relationship between urban form and energy consumption is the key constituent of climate change mitigation. However, there is limited research on the relationship between urban form and energy consumption at multiple levels. This paper proposes relevant urban form measures at different levels, and clarifies connections between urban form and energy consumption from a multi-scale perspective. The paper is based on the empirical work which is conducted in Ningbo, China. It consists of the following phases: 1) Typological analysis at different scales and choice of samples, 2) Spatial data collection, 3) Urban form indicators calculation at multi-scales, 4) Energy data calculation, which includes transportation energy, embodied energy and final operational energy. 5) Regression analysis.

In this paper, different regression models will be specified to test the hypothesized linkages among energy consumption at different levels/sectors and urban form characteristics at different levels. At neighborhood level, three OLS regression models will be used based on different dependent variables of the models: transportation energy of the neighborhood, embodied energy and operational energy for the buildings of the neighborhood. The independent variables are urban form metrics at neighborhood scale. At block level, three fixed effect regression models will be used based on different dependent variables of the models: transportation energy of the block, embodied energy and operational energy for the buildings of the block. The independent variables are urban form metrics both at neighborhood and block scales. Fixed effects regression models will help address the issues of correlated errors as is expected with this research design. At building level, two fixed effect regression models will be used based on the two different dependent variables of the models: embodied energy and operational energy. The independent variables are urban form metrics both at block and building scales.

References

Over the past decade, the number of communities including green stormwater infrastructure (GSI) in their stormwater management program has increased dramatically. Despite the growth, there has been little research on the strategies necessary to achieve a concentration of green infrastructure sufficient to impact water quality and quantity and to reduce burdens on centralized systems. Property owners are still most likely to install GSI
when they are seeking approval for a development. As a result, in mature, slow-growing, and contracting cities, it will take decades to create an effective green infrastructure network through land development regulations and incentives alone. In these communities, retrofitting existing residential and commercial properties with GSI will be critical in creating a connected network of green infrastructure projects that complement centralized stormwater management systems.

This paper examines the effectiveness of two types of retrofitting incentives - stormwater fee discounts and direct financial incentives - and their prospects for creating a critical mass of GSI in slow-growing and shrinking communities. The work is based upon case studies of three American cities that employ both strategies: Minneapolis, MN, Portland, OR, and Seattle, WA. Evaluation of green infrastructure retrofitting incentives in these three cities suggest that the main challenges are imposing stormwater fees and credits high enough to persuade private landowners to retrofit their properties with GSI and encouraging a mix of green infrastructure types in targeted locations to produce an effective green infrastructure network.

The paper concludes with recommendations for planning agencies and organizations considering adopting or adjusting GSI retrofitting incentives. The experience of these three cities suggests that communities should consider the spatial and cost implications of encouraging different types of GSI, offer incentives tailored to the needs of particular watersheds or city districts, and consider phasing incentives.

References

Abstract Index #: 83
ARE RESILIENCE STRATEGIES EFFECTIVE FOR RISK PERCEPTION?
Abstract System ID#: 309
Poster

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The purpose of this research is to identify the effectiveness of resilience strategies relating to risk perception. Risk perception is the critical issue in coastal communities which are exposed to storms, hurricanes and tides. These hydrological events create fluvial, pluvial and coastal floods. Worldwide, many coastal communities are vulnerable these hazards. People pay attention to risk. Risk has relationship consist of awareness, worry and preparedness (Raaijmakers et al., 2008): Awareness increases worry, which leads to preparedness which is a key measure in reducing floods. Recently, it has been analyzed based on psychometric and cultural (institutional and social factors) theory (Bucheker et al., 2013). Therefore, risk perception should be combined with natural hazard management. This approach can be identified for improving resilience for natural disasters.
Despite these potential effects, many risk studies have focused on technical methods. Relationship of risk elements (awareness, worry and preparedness) was shed light on (Bradford et al., 2012; Buchecker et al., 2013). Even though resilience has become a significant issue in response to natural hazards in urban areas, it comes with a lot of challenges and needs acknowledgement and responsibility of risk among stakeholders (Bradford et al., 2012). No matter how devoted planners and public officials are to devising a good plan, it is impossible to achieve their goal without fostering responsibility around community flood risk. The strategies should be evaluated with people who live in coastal communities (Buchecker et al., 2013).

Many studies have emphasized that mitigation is the core of community resilience (Godschalk, 2003). Resilient communities can reduce damages through creative adaptation and capacity (Beatley, 2009). Following natural hazards, adaptation at the community and city level can prepare communities against future hazards. Overall, they are divided into structural (levee and channelization) and non-structural strategies (a natural hazard mitigation plan, land use planning, regulation and insurance)(Peacock et al., 2010). Preparedness at the community and city level affects the personal-level variables of awareness and worry. Though the strategies are sensitive to stakeholders, their effectiveness have often been employed in scientific and economic methods (Rose et al., 2007) and disconnected with people’s satisfaction (Bradford et al., 2012).

The following question is the main question: Are the mitigation strategies effective in increasing awareness and reducing people’s worries?

This research employs MLM (Multi-Level Modelling) in exploring the effectiveness of mitigation strategies. As written above, strategies can be implemented on multiple levels (community and city). This is because worry and awareness are affected by the individual effectiveness of strategies at the community as well as the implementation of institutional strategies at the city level. To overcome these challenges, this research employs the MLM method. To gather data, we conduct a phone survey of coastal communities in South Korea during the rainy season. Dependent variable is people’s worries. The independent variables are categorized: awareness, effectiveness of community strategies and factors at the city level. The effectiveness of mitigation strategies is evaluated based on people’s satisfaction. The control variables are personal and city variables. Personal variables are risk awareness, age, income and reliability of public officials. City variables are durability of housing, hazard experience, public finance and regulation.

The results take into account the interrelation of personal and city factors. To incorporate many different kinds of variables, this research employs the MLM method. Using a creative approach, we can create a model to combine risk perception and resilience strategies. Given that effective strategies are significant in this area, flood risk managers and experts can be answered how best to provide flood strategies to people. Without the understanding of people, flood mitigation policies are ineffective and liable to fail.

References
Relocating coastal communities after disasters is becoming increasingly important. However, relocation is a difficult policy decision because it may increase vulnerabilities of the displaced communities. Varying pressures, including the need for urgency, mean that post-disaster relocation often proceeds without adequate understanding of its complexities, risks disrupting pre-existing financial and social systems, and exposes the affected communities to further hardship (Esnard & Sapat, 2014). Recent studies on post disaster relocation have begun to address the importance of community involvement. For instance, studies have shown that planning processes that enable greater community participation help make relocation quicker and more effective (Sipe & Vella, 2014). Additionally, there is increasing recognition that communities are capable of identifying their needs; in fact their involvement improves post-relocation satisfaction levels (Iuchi, 2014). Nevertheless, there are perceived difficulties in involving less privileged communities in the relocation process, as they typically choose to continue living within existing conditions without considering relocation as an option (Oliver-Smith, 1991).

To understand initial post-disaster relocation efforts in less privileged regions, this research targets Tacloban City of the Eastern Visayas in the Philippines. The November 2013 category five typhoon devastated the city with a tsunami-like storm surge, accounting for more than 2,600 dead and missing and about 29,000 completely damaged buildings mainly along the coast. Few studies have investigated the longitudinal relationship between relocation plans and its actual implementation processes through the lens of community involvement. Understanding the factors that affect relocation decisions in communities over time will help identify effective ways to achieve sustainable post-disaster relocation in less privileged regions.

This paper analyzes data collected during fieldwork in March 2014 and February 2015. These include: i) Tacloban City’s strategies and plans, ii) interview responses by central and local government officials, and iii) 72 resident interview responses from the six devastated coastal communities (Barangays) on post-typhoon coastal land use. Tacloban City was given the responsibility to lead rebuilding early on, which included the inland relocation of coastal communities to align with the national “building back better” concept. A month after the typhoon, the National Economic Development Authority publicized a rebuilding vision that emphasized a “no-build zone” to minimize vulnerabilities of coastal communities to future disasters (National Economic and Development Authority, 2013). Despite this vision, coastal communities had begun rebuilding in their pre-disaster land lots a month or two after the typhoon, as if they decided to continue living along the coast.

Research results indicated that efforts to relocate inland are not only continuing but are accelerating into the second year post-Haiyan. At the city level, a coastal “no-build” ordinance (Ordinance No. 2013-12-15A) prohibiting any permanent residential construction came into effect in March 2014 and has been recognized by coastal communities. The second year of recovery has seen the city government, central government, and the private sector preparing permanent relocation sites to accommodate about 14,000 households, overcoming an initial shortage of land and reconstruction funding. Perhaps most significant, the majority of residents in coastal communities have confirmed that although they are currently inhabiting their former coastal areas, they hope to be permanently relocated inland. The community’s hope to relocate inland, however, could change at any time. Continuing research is needed to understand the long-term processes regarding relocation and implementation decisions as well as community responses.

References

Abstract Index #: 85
SALINIZATION OF THE COASTAL PLAIN THROUGH SALTWATER INTRUSION - LANDSCAPES IN TRANSITION ALONG THE LEADING EDGE OF CLIMATE CHANGE

Abstract System ID#: 323
Individual Paper

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Climate change is transforming the outer edge of the Southern US coastal plain. Lower-lying parts of this region, characterized by extensive freshwater-dependent ecosystems, will be largely inundated by gradual sea level rise by the end of this century. In the interim, however, ocean waters are already penetrating and influencing freshwater-dependent coastal landscapes due to a combination of human and natural factors. This landward movement of salinity from the coast onto the coastal plain or “saltwater intrusion” represents the leading edge of climate change for many coastal landscapes. The salinization of surface waters and adjacent lands may lead to significant reductions in crop and timber yields in managed ecosystems, significant declines in ecosystem carbon sequestration in unmanaged ecosystems, and degradation of coastal water quality due to extraction of soil nutrients by sea salts. As this region, and similar regions worldwide, transform in response to and in advance of rising seas, the sustainability of these coastal landscapes hinges largely on a sophisticated understanding of the coupled human and natural processes influencing salinization of surface waters and adjacent lands. In this presentation, we will discuss a recently funded NSF project that focuses specifically on saltwater intrusion across the Albemarle-Pamlico peninsula of North Carolina, an area with wide variety of land uses and characterized by extreme socio-economic inequity. We will first discuss our efforts to create a comprehensive toolset – known as the saltwater intrusion vulnerability index (SIVI) – in order to enable place-based, system-level understanding of coastal systems at multiple spatial and temporal scales. Second, we will discuss efforts to create scenarios that will yield outcomes with predictive value in coastal systems that are easily understood by stakeholders while representing complex interactions between climate, hydrology, land use, and ecological processes. Third, by focusing on how information influences individual preferences, we hope to identify pathways by which outcomes could be used to enhance coastal sustainability. Together, these activities will help guide sustainable management of this region and similarly affected regions over the next several decades to centuries.

References
conservation policies sometimes focus only on biodiversity and may lack a holistic comprehension of ecosystems and their benefits at small scales. Areas where ecosystem benefits are not necessarily explicit still play an important role as a life-supporting system. Environmental and planning policies need to incorporate valuation estimates that include nature connectedness and services recognition of those related directly to the areas being managed (Schultz, 2002).

As a counterpart to the classic notion of top-down planning, tactical modes of environmentalism can arise in the form of qualitative, bottom-up approaches to local environmental problems within unevenly managed ecosystems. These approaches may provide a more thorough valuation of ecosystem services and allow us to explore cognitive, affective, and behavioral components at a local level (Schultz, 2002). Also, including both temporal and geographic dimensions of the environment, by focusing on individuals’ general relationship to nature protection, their specific experiences and spatial attachment may lead us to comprehend individual’s time perspective as short- vs. long-term interests (Schaffrin, 2011).

The proposed research will explore the nature connectedness, as a component of broader environmental awareness and concern, among the population who has a direct relationship with regulating ecosystem services provided by the Manatí river watershed in Puerto Rico. We expect to find higher levels of nature connectedness among those individuals that recognize regulating ecosystem services such as air quality and climate regulation. We will use validated measures of environmental consciousness (Hedlund-de Witt, Boer, and Boersema 2014; Jiménez and Lafuente, 2010) as well as methods for the measurement of materialism (Hurst, Dittmar, Bond and Kasser 2013). We will ensure they are appropriate for the local cultural context. Preliminary findings reflect considerable geographic and demographic variation, hence, we will use a stratified sample with a convenience component to conduct interviews in three watershed sites, defined by three buffer zones: upstream, midstream, and downstream. A minimum of 100 interviews will be conducted in situ, which will help ensure respondents are familiar with the ecosystem services they describe and value. Our results would assist in offering key input to environmental and planning education curricula, creating an open-source environment for tactical environmentalism and further research. In addition, help redefine regional sustainable practices and inform key public policy on ecosystem valuation approaches and watershed conservation.

References

Abstract Index #: 87
FACED WITH FOOD WASTE: UNDERSTANDING HOW THE BUILT ENVIRONMENT MAY SHAPE BEHAVIOR AND ATTITUDES
Abstract System ID#: 388
Individual Paper

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Food waste is the single largest material stream entering landfills where it generates 20% of the nation’s methane emissions. In response to statewide mandates for landfill diversion and greenhouse gas emission reductions,
cities in California are beginning to collect food waste at the curb to generate compost and biogas. These approaches rely largely on technological solutions, yet they still rely on and must work together with the everyday behavior of households purchasing, consuming, and disposing of food.

I will present qualitative and quantitative findings from the first and second phases of my empirical dissertation research that seeks to understand and affect how household behaviors and attitudes change with changing waste infrastructure. As more and more cities ask households to start separating their food waste, more understanding is needed regarding the effects of new waste infrastructure and how best to affect new household behavior.

Two models of community food-waste collection are explored; the first phase is in multi-family housing with a "community drop-bin" system, and the second is in single-family homes with a curbside collection program for food waste. Lessons from the first phase informed the second which scaled up the study design to reach nearly 600 households in a nearby Southern California community.

Households in both phases were asked to participate in an 8 week study. The studies included a pretest-posttest survey design, weekly tracking of food-scrap separation, direct measurement of food waste diversion, and in-depth interviews. Both phases measured the effects of food scrap separation on pro-environmental attitudes and unrelated pro-environmental behavior, or spillover behaviors.

The difference in participants’ environmental attitudes from pretest to posttest was statistically significant with a very large effect size. While it may seem counter-intuitive, this suggests that new behaviors made possible by changes in the built environment may actually change attitudes.

Furthermore, results from surveys and interviews revealed three themes: the importance of "making it easy", the balance between users and infrastructure, and increased environmental awareness and spillover behaviors. Almost every interviewee indicated that the provided infrastructure, such as the in-home caddy or the community collection bin, made food scrap separation easy for them. However, while infrastructure made it easier, I found that simply "making it easy" is not enough.

I will present lessons learned on how community or municipal efforts to collect food waste must balance waste collection infrastructure and users, and how to help households balance in-home collection systems with food waste volume, bin maintenance, and frequency of removal.

Finally, many participants discussed how they started looking at waste and food differently, changing purchasing decisions, and recycling more. Some even started engaging in other pro-environmental behaviors that were unrelated to food scrap separation like purchasing cage free eggs. These results point to opportunities for practitioners and academics to quantify spillover effects from policy implementation or changes in the built environment to improve sustainable urban systems.

Ultimately this work can inform the development of policy implementation and evaluation tools and efforts to provide user-oriented sustainable infrastructure in urban organic waste management. Improving household participation in curbside food waste collection programs will help cities achieve mandates for landfill diversion and greenhouse gas reductions, increase awareness of food waste, and reclaiming food waste as a resource.

References

SEA LEVEL RISE IN THE HAWAIIAN ISLANDS: ADAPTING TO FUTURE COASTAL HAZARDS

Abstract

Local planners, communities and other stakeholders seek projections of SLR impacts, such as shoreline change with a high degree of confidence and place-based accuracy. Most commonly, historical data or geometric models are used to forecast hazards such as future erosion. However, the nature of open coast environments as dynamic and complex makes it difficult for place-specific and accurate predictive models. An adaptive risk management approach with probabilistic methods offers promise to improve the scientific basis for SLR adaptive land use planning.

This paper first presents a brief overview of historical approaches to land use planning to manage coastal hazards with a special focus on coastal erosion. We discuss the use of historical data on shoreline change for coastal setback policies in Hawai’i and elsewhere in the U.S., and review different approaches to incorporate sea-level rise. We then report on an empirical model of shoreline change in the Hawaiian Islands that incorporates future sea-level rise. We use this model to produce probable erosion hazard zones and map overlays of the coast. Future rates of shoreline change are estimated for sites across Hawai’i. We show that future distances of both shoreline retreat and accretion are dependent on the local coastal setting and long-term sedimentation processes interacting with SLR. We discuss the application of this probability-based model for the prediction of future shoreline conditions as a coastal hazards planning tool.

The second part of this paper presents an application of this tool for land use planning in two coastal locations in Hawai’i. These locations differ based on shoreline development patterns, short and long-term erosion rates, and data uncertainty. We present how county planners, working with local communities could use the tool to identify risks to properties, infrastructure, natural and cultural assets 50 to 100 years in the future. We use probable erosion hazard maps to estimate exposure and describe potential impacts at the community scale. Important factors for communities to consider in describing impacts are the spatial and temporal extent, and the probability of risk based on data uncertainty (Bell et al., 2014). We show how communities can use the maps to develop a decision matrix of priority adaptation actions that are place-specific. Through these examples, we emphasize opportunities for communities to shape land use policies using a range of strategies that respond to local conditions and incorporate principles of adaptive management. We discuss the benefits of the tool for improving land use planning in the face of SLR, including the ability to account for regional variability in coastal change, the explicit incorporation and management of uncertainty, and building in flexibility into future plans.

References


Abstract Index #: 89  
DEVELOPING SUSTAINABLE RECOVERY ANTI-POLLUTION POLICIES FOR THE CATASTROPHIC POLLUTION IN CHINA’S HUAI RIVER  
Abstract System ID#: 404  
Poster  

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Water pollution, whether natural or man-made, is a tremendous tragedy for people and the environment. However, even the movement of water within a polluted river system can cause severe environmental issues and eventually lead to an even greater tragedy for all human beings. This study will examine the pollution dynamics caused by agriculture and human activities in the Huai River Basin, China, the relationship between human systems and natural systems, and how mitigation policy affects the pollution dynamics of the Huai River.

The Huai River Basin is one of the most populous regions in China with a length of 660 miles located in east central China. It is one of China’s major rivers and drains 67,000 square miles and support 170 million inhabitants. Based on the China Water Resource Data, six billion tons of wastewater ran into the Huai River in 2013, and the median wastewater discharge was five billion tons in the past decade (World Bank, 2013). The World Bank did an environmental assessment report in 2011 that showed the concentration of Chemical Oxygen Demand, Biochemical Oxygen Demand and Ammonia is ten times, eight times, and sixty times higher than the national fresh water standard.

Previously, the Huai River had 189 reported species of fish and was one of the major freshwater fish producing areas in China, but the number of species of fish decreased about 52% in recent years (Huai River Commission, 2013). The impact of the polluted river has negatively influenced people’s health in the Huai River Basin, such as causing people to become more susceptible to developing various kinds of cancer. Some villages along the river have negative a birth rate.

In 1994, the central government initiated the first comprehensive water pollution control program for the Huai River Basin, but it only influenced the industrial wastewater load to the Huai River. Currently, the Chinese government often only requires major industries to reduce wastewater emissions. As a result, there is no solid system to manage the agricultural and domestic wastewater flux into the Huai River.

The goal of this research is to develop an adaptive water pollution mitigation policy that maintains and balances the dynamics of natural and human systems. These polices will specifically provide guidelines for policy makers, local governors, water experts, and residents not only in the Huai River Basin, but also for other developing countries.

Research objectives include: 1) identifying how the major pollutants affect fishery and human life on existing Huai River Basin areas; 2) developing a Total Maximum Daily Load (TMDL) model to determine how the capacity of the Huai River reacts towards the various pollutants; 3) explaining how the new river mitigation policy is helpful for dealing with agriculture and domestic waste; and 4) determining how these new policies will be accepted by decision makers to make a real impact against the Huai River pollution.
This study depends on a combination of research methods. Total Maximum Daily Load Analysis will be used to verify pollutant density and content matter in the Huai River Basin. Odum’s Emergy Synthesis (2000) and Brown’s Pollutant Empower Density (2010) will be used to support the effectiveness of this research. David Easton’s political system will be blended with other logistical thoughts to form the theory of this research. Three successful river management case studies will be presented from an empirical point of view to propose practical suggestions to control the Huai River pollution. Finally, policy suggestion will be conducted in terms of agricultural and domestic waste management around the Huai River Basin.

References

THE PATCH SIZE EFFECT ON NEIGHBORHOOD FLOOD DAMAGES

Abstract Index #: 90
Abstract System ID#: 420
Individual Paper

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Ecological studies of cities are relatively new. The provision and quality of ecosystem services are frequently predicted according to landscape ecological theory, where ecological function is analyzed in terms of the spatial structure of landscapes. A patch is the smallest distinctive landscape feature with ecological value that can be used to describe or classify a landscape system. The general understanding is that, in an urban environment, patches of green space help counter the negative impacts that impervious surfaces have on flood intensity and damages by shifting the balance of the water cycle more toward evapotranspiration and infiltration flow processes rather than runoff flow processes. Wetlands and forest, for instance, are patches of focal interest for the study of hydrological services in urbanized areas. However, it is not yet clear if it is the size of a specific habitat patch, or the size of a diverse group of habitat patches that has a significant effect on the hydrological performance of urban environments.

This study examines how hydrological services provided by urban natural areas respond to changes in the size of different landscape patches. The performance of hydrological services is measured in terms of neighborhood residential flood damages in the Houston area associated with Tropical Storm Allison (2001). Land cover characteristics of neighborhoods in the study area are determined by using gridded and parcel-based land use GIS datasets. Unique and diverse patches of urban natural areas are described using landscape metric algorithms. Controlling for other relevant socio-demographic and environmental factors, the role of patch size of urban natural space is examined in spatial regression analyses. Patches and diverse groups of landscape patches are seen as critical for maintaining hydrological services within urban neighborhoods. It is hypothesized that large-diverse patch sizes of urban natural areas correspond to reductions in residential flood losses, and that large patches of high ecological value (wetlands, forest) correspond to greater reductions than those of low ecological value (agriculture, open developed space).

Results from this research improves our understanding of how landscape structure elements can provide ecosystem services in urban environments. A better understanding of the ecological performance of urban natural space with respect to flood hazards can help with the development of land use adaptation strategies to flood risk that would reduce potential flood damages to residential property.

References
THE CONCEPT AND PRACTICAL RELEVANCE OF SPATIAL DISASTER RESILIENCE

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Concerns about the sustainability and resilience to disasters of urban areas is now a driving force in urban planning and design. The negative impacts of more frequent and devastating floods worldwide have led to a paradigm shift in land use planning. The goal is no longer to reduce system vulnerabilities or to sustain a certain level of urban services, but rather to develop practical means for communities to cope with change and uncertainty. For the past few years, planning practitioners, emergency managers, and local decision-makers have been tasked with finding ways to operationalize this goal and supplement traditional development plans and risk management programs with adaptation strategies that would enhance a community’s resilience to floods. Using spatial theoretical principles developed in landscape ecology, Cumming (2011) offers the concept of spatial resilience to describe resilience in terms of spatial patterns and effects. According to Cumming, just as pattern-function relationships are suitable for describing the integrity of ecological systems, they are also suitable for describing the integrity of social systems. Therefore, another way of enhancing community disaster resilience is by preventing the critical loss of desirable attributes in the spatial distribution of land uses, structures, and natural amenities of urban systems. The aim of this poster is to illustrate how the concept of spatial resilience can be applied to land use planning. The study uses the patch-corridor-matrix model to examine the relationships between landscape spatial metrics characterizing the ecological integrity of urban green spaces and the hydrological services they provide. Residential property damages in the Houston area after Tropical Storm Allison in 2001 are used to illustrate an empirical evaluation of spatial resilience using landscape metrics.

References

This paper examines how recommendations for ecological restoration at a landscape scale are collaboratively developed and integrated into the United States Forest Service (USFS) decision-making and implementation processes. As the USFS embarks upon innovative approaches to collaboration after decades of legislation that encourages public input and collaborative planning processes, the Collaborative Forest Landscape Restoration Program (CFLRP) marks a shift as it requires collaboration through planning, implementation and monitoring on landscape scale ecological restoration projects.

While collaborative planning has become widely practiced in public lands management (Wondolleck & Yaffee, 2000; Koontz et al., 2004), challenges emerge about how to provide for effective collaboration throughout implementation. Collaborative literature suggests that formal processes create a clear decision-making structure and provide legitimacy (Bryson et al., 2006), and more informal processes help generate the dialogue and innovation necessary to resolve complex problems (Innes et al., 2007). Other normative principles suggest the success of collaborative planning is contingent upon having an open and inclusive process with representation from all stakeholder groups that have a stake in the issue at hand (Gray, 1989; Innes & Booher, 2010). In this paper, we examine how different collaborative organizational structures can shape effective collaborative implementation. The question this research analyzes is: How do the different collaborative organizational structures perform in processing information, enabling dialogue among diverse interests, generating recommendations, and contributing to the implementation of landscape restoration? We address this question through a comparative case analysis of five of the collaborative groups originally funded under CFLRP in 2010. We conducted more than 10 interviews with participants from each landscape collaborative (total of more than 50 interviews), analyzed numerous documents from the original proposals to annual reports, NEPA planning documents, meeting minutes and other relevant materials, and observed collaborative meetings on all of the landscapes.

While each collaborative group developed various organizational structures and processes for creating opportunities for dialogue and processing technical information, they each performed differently in regard to the generation of recommendations for restoration treatments. Through our comparative analysis of the different collaborative groups, we find that the highest performing group was strategically and systematically inclusive of a range of interests and formally established with a charter between the group and USFS. Meanwhile, informal and exclusive structures struggled to obtain social legitimacy and were unable to develop and deliver recommendations that were taken up by the agency. Moreover, inconsistent meeting forums made it difficult to engage in dialogue, process information, or generate recommendations. We conclude with propositions about collaborative implementation. First, we argue that while informal dialogue is crucial to collaborative processes, formality provides legitimacy and transparency of process that can enhance consistent engagement in dialogue. Second, inclusion of diverse stakeholders is critical to ensure that collaborative input is socially and politically legitimate as well as meeting minimal legal requirements. These propositions refine existing theories of collaborative governance while adding nuance to our understanding of effective collaboration in practice.

References
Strengthening airflow at city scale in urban planning is proposed in many Chinese cities to mitigate PM2.5 (Particulate matter less than 2.5 micrometers) pollution these years. Abundant studies in American cities and European cities have illustrated the spatial and seasonal trends of PM2.5 pollution, and the correlations with airflow patterns. However, the relationship between PM2.5 concentrations and airflow movement pattern in Chinese cities has not been well understood.

To solve this question, we proposed a methodology which includes spatial and temporal analysis, inverse regression analysis and descriptive statistics to quantitatively evaluate the impact of the airflow velocity and direction on the PM2.5 concentration. To demonstrate the usage of this method, we perform the case studied on 30 cities which are chosen to represent different regions in China. In general, results indicate the existence of inverse relations between PM2.5 pollutants and airflow speed in 20 of all sampled cities. We also investigate the rest cities to identify the reasons of different relationships.

Cluster analysis shows PM2.5 pollution in Chinese cities having regionalism. Inland cities are more polluted than coastal cities. Time series analysis shows that PM2.5 pollution in most cities is highest in winter while lowest in summer. Inverse regression analysis shows that PM2.5 level decreases when airflow velocity increases. The marginal effects of airflow velocity are most significant in mega cities and heavily polluted cities. However, 10 of sampled cities did not show relations or perform other patterns. The reasons are distinguished in each city. Impacting thresholds of airflow speed are in the range of 8 m/s to 10 m/s. Planners could use these results guiding wind canyon plans or other strategies importing airflow at the macro level.

References

Imagine a city located on a tropical island with towering skyscrapers, one of the highest population densities in the world, expanding industry, a growing populace, no natural large aquifers or lakes...and a goal of becoming water self-sufficient by 2061. This is not a fantasy - it is the reality of Singapore. Much to the world’s surprise Singapore is well on its way to meeting their goal of independence from imported Malaysian water. In fact, between 1998 and 2013 Singapore has steadily reduced its per capita domestic water consumption by more than 9 percent - from 166 to 151 liters per person each day. During this same period they have implemented (and reportedly gained public acceptance for) the largest municipal recycled water system in the world (NEWater) – a huge feat considering the psychological hurdles (i.e. the ‘yuck’ factor) that has prevented many other water scarce cities from adapting similar technology (PUB, 2013).

The sustainability of potable water systems is not a problem unique to Singapore. In fact, planners, diplomats, and engineers from water scarce areas around the world have traveled there to learn from Singapore’s water practices firsthand. Visitors often find this experience to be inspiring, enlightening, and indicative social proof that Singapore’s water strategies work (Singapore Public Utilities Board, 2013). What may not be as apparent, however, is if Singapore’s successful integrated water management strategies would work as well in vastly different cultural contexts.

This mixed-method study discerns the key cultural and behavioral factors behind Singapore’s’ two most successful Integrated Water Management results – the implementation of NEWater and the significant decrease in per capita household water consumption. Ajzen’s Theory of Planned Behavior serves as a theoretical base for the analysis of data collected through a combination of participant observation, semi-structured interviews and a nationally representative survey in Singapore. Each method uncovers distinct layers of behavioral and cultural detail, which are then linked with more generalizable dimensions of national culture such as power distance and collectivism/individualism (Hofstede, 2003). Finally, a new framework for understanding cross-cultural ‘success stories’ is proposed. It is expected that this framework will help urban planning practitioners better understand the often tacit and elusive cultural component that make many sustainable strategies referenced from abroad successful in their original context.

References
“Chronic Disease is a long-lasting condition that can be controlled but not cured. .... Although chronic diseases are among the most common and costly health problems, they are also among the most preventable and most can be effectively controlled.” (CMDC, 2011)

This paper critiques the prevailing conception of sustainable urbanism as equilibrium and proposes an alternative: treat environmental unsustainability as a chronic manageable disease. Through the examination of urban sustainability, population health and political economy texts, I contrast these alternative stances towards sustainability: striving for balance (between social, environmental and economic priorities), or managing our unsustainable urban systems to minimize damage and buy time to enable adaptation and restoration. This is not just a debate between two abstractions: these two approaches lead to divergent political rhetorics, planning designs and measures of sustainability.

If “sustainability” once suggested restoring the equilibrium of an urban-ecological system (i.e., a steady state of resource and land uses), we may eventually grow more comfortable with the idea that sustainability is dynamic, unpredictable and unstable, plagued with internal contradictions. Sustainability contains contradictions not just because of the tensions between planning’s three goals (economic development, environmental protection and social justice), but also because the very idea is contrary to the modern capitalist condition of restless growth — of ceaseless extraction, commodification and abandonment. In our era of creative destruction, the best we can achieve may be hybrid landscapes of the sustained and the transitory: a viable compromise between sustainable and unsustainable practices. We will likely not know, in the long run of history, whether human life is intrinsically unsustainable or whether mass urban society can live “in harmony” with nature. Planning’s contribution is to carve out habitat niches that support life, in a volatile world, for a diverse array of populations with a minimum of misery and disparity. One can’t “cure” unsustainability. But one can treat it as a chronic, increasingly manageable disease: to incrementally transform a once fatal environmental deterioration into a tolerable condition.

This manageable tension better matches the practices and internal contractions of planning itself. Though planning portrays itself as a modest yet heroic profession on the side of the underdog (whether nature or neighbor), these contradictions repeatedly pull the field in conflicting directions. It is not institutional schizophrenia, but rather a systemic outcome of planning’s embedded role in the complex network of public service, political economy and the built environment, that steers the profession through the contradictions of urbanization, social justice and sustainability. Our profession works to both aggressively expand metropolitan boundaries and erect greenbelt bulwarks to conserve the natural and historic landscapes; we both submissively serve the economic mandates of the elite urban growth machine and advocate for the impoverished and disenfranchised urban dwellers. These activities are not primarily about striking a balance, but rather about managing conflicting priorities, capitalizing on overlapping interests, seeking pragmatic solutions, and asserting the power of good design.

I connect this shifting view of sustainability to two emerging public debates. First, the current fascination with resilience has spurred sustainability advocates to acknowledge that the world is volatile and full of threats both acute and chronic — even if the resilience literature itself sometimes reveals a stalwart belief in equilibrium. The second is climate change, which — by irreversibly throwing the global climate system out of balance — has upended the adequacy of sustainability-as-equilibrium maintenance. Climate change has also given greater legitimacy to adaptation (once rejected as a sign of timid acquiesce) as a lamentable but unavoidable complement to mitigation.

References
Abstract Index #: 96

ECONOMIC COSTS OF A SHRINKING LAKE MEAD

Abstract System ID#: 499
Individual Paper

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Persistent arid conditions and a growing urban populations have drastically reduced the once-mighty Colorado River. This has led to the visible reduction of lake reservoirs all over the Southwest. Lake Mead, due to its importance as a major source of water supply for Las Vegas residence, has received a great deal of media attention displaying the “bathtub ring” around the edge of the lake exposing surrounding rock that used to be underwater (Hobson, 2014; Tracy, 2014). Lake Mead’s water levels have been gradually decreasing since 1983; however, the rate of decrease has been fairly drastic since 2010 (Allen, 2003; NASA, 2010). The recent drop in water levels has caused local marinas to close, thereby affecting the aesthetic and recreational value of the lake. Although several studies documented local impacts of water quality, we know of no studies that evaluated how shrinking water levels are capitalized in surrounding properties.

In order to address the cost associated with the degradation of Lake Mead, we propose a spatial hedonic analysis of home values in nearby Boulder City, NV. Lake Mead as well as the surrounding land is a designated National Recreation Area (NRA). The lake is a protected area and does not have development adjacent to the water. Instead, all local and tourist related development (e.g. hotels, restaurants, boat rentals, etc) are in Boulder City, four miles from the lake. While most hedonic studies evaluate properties adjacent in order to establish the amenity effect associated with water quality, this study will focus on how drops in water levels impacts the value of recreational access to the lake, as well as the premium associated with views of the lake.

Walsh et. al., 2011 found that surface area of the water body as well as water quality improvements had a significant and positive impact on non-waterfront homes as well as waterfront homes. Suggesting that size of a watershed does matter. Phaneuf and colleagues (2008) point out that water quality often affects local neighborhoods and local recreation access. They find that an individual, when choosing a home, considers the availability and quality of local recreation sites for short outings. They further find that changes in water quality affect the value of recreation access as well as the amenity value of proximity. Both studies support the inclusion of non-waterfront property in hedonic pricing models. Their results suggest that water conditions can affect households that utilize water bodies for short day trips, thereby influencing consumers’ residential choices and subsequently home values.

In an effort to capture the effects associated with water level drops and avoid potential problems associated with the 2008 recession, we will analyze home sales in 2010-2013. The spatial hedonic models will relate real estate data for Boulder city from Dataquick’s Clark County file to measurements water level from the US Bureau of Reclamation.

This study will contribute to water related hedonic studies in two ways. First, while other hedonic studies evaluate water quality, this study will quantify the economic impact of shrinking water levels, a critical consequence of recent climate patterns that is likely to continue. Second, our work will evaluate the effect of a shrinking lake on non-adjacent properties to assess whether the health of water bodies impacts more than just waterfront properties. By quantifying the material cost associated with environmental deterioration, we will
provide voters and decision maker’s additional information regarding the economic costs of environmental degradation

References

Abstract Index #: 97
ENERGY-EFFICIENT RE-USE OF EXISTING COMMERCIAL BUILDINGS
Abstract System ID#: 502
Individual Paper

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Increased demand for urban living, financial incentives for redevelopment, and conducive planning regulations are leading to significant commercial building re-use. This trend represents an opportunity to upgrade the energy performance of the existing building stock in older, more walkable downtowns, and to achieve preservation goals. However, some advocates of building re-use resist imposing the cost of energy improvements on associated projects, while many energy efficiency advocates do not distinguish key distinctions between existing and new buildings. Building code officials experience this tension when reviewing improvements to existing buildings, and many find that sections of the widely-adopted International Energy Conservation Code are pragmatically unenforceable. This paper characterizes the challenge using evidence from a regional survey of code officials and interviews with redevelopers.

The paper then explores how to improve outcomes. First, it tests policy alternatives on a representative sample of the U.S. commercial building stock, the U.S. Department of Energy’s Commercial Building Energy Consumption Survey (CBECS). Combining CBECS and CoStar data, it then investigates how these policies might differentially affect the commercial building stock of contrasting towns (one compact and historic, the other sprawling) in the Greater Philadelphia region. A case study of a specific renovation project illustrates the policy implications. Promising regulatory strategies that emerge from this analysis include exempting smaller buildings and less energy-intensive occupancies and systems, and creating simple lookup tables that provide succinct guidance to redevelopers and code officials.

This paper is relevant to planning practice and public policy because code officials enforce longstanding life-safety codes more assiduously than they do the newer energy codes, and it appears that these codes need revisions to make them more cost-effective and enforceable. A better understanding and implementation of building energy codes can have positive implications for both energy performance and downtown revitalization. This paper advances planning education by highlighting interdependencies among the national policy objective of energy efficiency, the ubiquitous local planning objective of downtown revitalization, and the details of regulating construction practices in existing buildings.

References
TOWARDS SUSTAINABLE WATER RESOURCE PLANNING IN SIEM REAP CITY, CAMBODIA: INTEGRATING TRADITIONAL KHMER ECOLOGICAL VALUES IN A TOURISM HOT-SPOT

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Despite being a developing country, Cambodia does not face a water shortage. However, due to the lack of finances and poor water management techniques, some parts of the country experience significant potable water and sewage problems. As Aguilar (2010) suggests: "In spite of the high availability of drinking water sources in Cambodia, the lack of infrastructure development means the country faces serious challenges with respect to safe drinking water" (p. 28). Siem Reap City (SRC) is one of the most well-known cities in Cambodia with a growing potable water shortage problem. The city was created to accommodate tourists visiting the massive Angkor Wat temple complex, one of the most visited tourist sites in South East Asia. The temple complex is situated in a vast water management network, developed by the Khmer between the 8th to 14th centuries that stretches over 1000 square kilometers with three distinct interconnected zones for control, storage and distribution (Fletcher et. al. 2008). Through traditional Khmer ecological values the water management network has existed sustainably for the past 1000 years until recently. The city's tourist growth which increased 10 times over the past decade to over 2 million per year. Projections are 6 million per year by 2020 after the new international airport at Siem Reap opens in 2015 (St. John-Grey, 2011). This growth is occurring despite a 1995 study from UNESCO pointing out that the maximum sustainable capacity would be about 700,000 tourists per year. UNESCO warned that uncontrolled development will significantly degrade archaeological monuments built on less stable sand (Soubert and Hay, 1995). The population of permanent residents in the city has doubled in 10 years the number of hotels, guesthouses, and lodges has grown from 8 in 1995 to over 350. Over that period of time the hotel industry has become the largest water consumer in SRC (Doherty, 2010). However, the water supply authority does not have the capacity for this urban growth. Therefore, to make up for the shortfall hotels and guesthouses pump their own groundwater for daily uses, which is not sustainable if left unchecked. In response the city is upgrading the capacity of the potable water treatment and sewage facilities, that is, increasing the supply side through water engineering. Our study aims to tackle the demand side through environmental planning and restoring traditional ecological values that appear to be lost in the rush of tourist dollars and western materialism. The research methods implemented between 2013 and 2015 included a literature search of hotel Best Practices in water conservation, an audit of water usage and wastewater, interviewing key Cambodian government officials, and water use audits at a sample 15 hotels in SRC. Overall the research suggest that water planning in SRC is focused on increasing supply with little effort put into conservation (demand). In particular there is increasing use of groundwater in the city as water is consumption increases faster than water supply infrastructure can handle, groundwater use is not being monitored effectively, and that there is a growing geotechnical threat to the Angkor Wat temple complex from depleted water tables. The hotel interviews and audits indicated that 11 of the 15 hotels managers that owned by Cambodians had limited knowledge about sustainability in general and water conservation in particular, and in water conservation strategies are not being employed. There is potential for up to 40% reduction in water consumption based on established LEED standards, and up to 50% with more aggressive conservation measures.
THE ROLE OF LAND USE PLANNING IN BUILDING CLIMATE ADAPTIVE COMMUNITIES: EVALUATING THE WAKE OF SUPERSTORM SANDY

Abstract Index #: 99

THE ROLE OF LAND USE PLANNING IN BUILDING CLIMATE ADAPTIVE COMMUNITIES: EVALUATING THE WAKE OF SUPERSTORM SANDY

Abstract System ID#: 528
Pre-organized Session: Coastal Climate Change Adaptation and Resilience

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An unprecedented opportunity exists in the wake of a storm to overcome the obstacles to implementing innovative hazard and climate change adaptive policies (Titus, 1984). In this study, we examined coastal communities recovering from Superstorm Sandy to assess their recovery planning process, analyze the range of projects they chose to implement to foster resilience to coastal storms and sea-level rise, and use those findings to understand the limitations and challenges to using land use strategies to recover and build long-term resilience to climate change. We focus on communities participating in New York State’s (NYS) Community Reconstruction Zone (CRZ) program, an unprecedented community driven recovery planning process. We performed a comprehensive assessment to analyze and categorize the 1,431 recovery projects proposed by the 45 communities participating in the CRZ program, and to better understand the recovery strategy choices communities made. We also examine in greater depth three case study communities in New York City and Long Island to elucidate what socio-economic and governance factors provide the basis for successful project implementation. Despite the availability to communities of over $65 billion in federal funding for implementation of recovery projects, NYS emphasized resilience strategies that do not rely on external funding, as not all projects can be funded. However, our results suggest that local plans were primarily investment vehicles for federal funds: the implementation of infrastructure, both gray and green, and building strategies were greatly preferred over lower-cost options such land use planning. We find that communities struggling to recover from a devastating storm most frequently use hard defensive infrastructure to protect existing settlements rather than considering long-term land-use strategies, such as building more resiliently in smarter locations. However, land use planning strategies have higher average benefits, lower costs, often improve environmental quality, to a greater degree than gray infrastructural approaches, and are more adaptive over the long-term, without major government investment. In conclusion, our research suggests that communities focus on projects that generate the most co-benefits for climate adaptation and other public goods at the lowest costs, emphasize regional goals, and are implementable without external support. Land use strategies, such as implementing flood ordinances, using conservation easements and updating comprehensive plans, while often less politically attractive than major investment in infrastructure, can make a significant difference in the long-term sustainability and resilience of coastal towns and cities.
References


Abstract Index #: 100
COLLABORATIVE GEODESIGN TO ADVANCE MULTIFUNCTIONAL LANDSCAPES
Abstract System ID#: 532
Pre-organized Session: Collaborative Challenges on Working Landscapes

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This paper explores the application of collaborative geodesign in the context of multifunctional landscape-scale planning and design to optimize production of food and biomass commodities with enhanced water quality and habitat performance. The paper uses the Seven Mile Creek Fuelshed Project in south-central Minnesota as a research context for examining the ways that Geodesign can enhance collaborative planning processes, build knowledge of natural and production systems at the landscape scale, and integrate consideration of feedback from multiple performance criteria into an adaptive and iterative process for planning and designing working landscapes. The paper describes the development and application of the Geodesign system used in the landscape planning process and offers important insights into how the system contributed to the collaborative stakeholder engagement, informed stakeholder decision making, and enhanced the landscape planning outcomes. The collaborative geodesign system was deployed via an interactive visualization and mapping interface displayed on 55” touchscreens and used by stakeholder participants.

The paper draws on multiple disciplinary perspectives, highlighting the contributions of Geodesign in advancing stakeholder consensus in balancing natural resource protection and agricultural production priorities. Geodesign is emerging as an important evolution of earlier innovations in planning support systems and public participation geographic information systems (e.g. Klosterman 1997). Geodesign brings in insights from geography and design, and importantly, considers the integration scientific knowledge and human decision making (e.g. Goodchild 2010, Nassauer and Opdam 2008). When geodesign can be coupled with collaborative processes wherein participants have the opportunity to learn from each other (e.g. Mandarano 2008), the prospects for the learning can be enhanced. Geodesign also has the potential to increase the prospects for multifunctional landscapes that integrate considerations of food, fuel, fiber, and ecosystem service production (e.g. Boody et al. 2005).
A mixed-method analytical approach was used to assess stakeholder perceptions and the outcomes of the collaborative geodesign process. Pre and post-process surveys and interviews were used to assess outcomes at the individual participant and group scale. The findings suggest that collaborative geodesign offered opportunities to use scientific information to inform planning and design, facilitated interaction and communication within small groups, and enhanced social learning. Further, the participants moved toward consensus about the prospects for multifunctional landscapes that balance biomass production, agriculture, habitat, and water quality.

This project is moving into a second phase with a follow on stakeholder process focused on biomass supply chain development and sustainable landscape management. A paper for the first phase (described above) is under review.

This paper is proposed as part of the pre-organized session entitled Collaborative Challenges on Working Landscapes.

References

Abstract Index #: 101
**ZERO NET ENERGY COMMUNITIES: THE FEASIBILITY OF MEETING RESIDENTIAL AND VEHICLE ENERGY DEMAND BY ON-SITE SOLAR ENERGY SUPPLY**

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In the past few years “zero-net energy (ZNE)” has been rapidly emerging across the states as a concept of achieving urban sustainability by reducing energy consumption and increasing on-site renewable energy supply. Most ZNE practices have focused on an individual building level, naming “Zero-net energy buildings” as those that are generally expected to produce as much renewable energy as they typically consume over a year (Pless & Torcellini, 2010). The State of California adopted its ZNE building standard for all new homes built in 2020 and beyond as a part of its first statewide Long Term Energy Efficiency Strategic Plan in 2008 (California Public Utilities Commission, 2008). In addition to the revised building code Title 24 to promote energy efficiency, on-site solar energy generation is an integral part of achieving ZNE building goals. Go Solar California of 2007 targeted installing 3,000 megawatts of solar energy systems on homes and businesses by 2016, and as of August 2014 the program had achieved 2351 megawatts (California Energy Commission & California Public Utilities Commission, 2015). Beyond a building scale, there are a handful of ZNE initiatives on a community scale, including the BedZED in London, England, the West Village in Davis, California, and Kaupuni Village, Oahu, Hawaii, which incorporate ZNE buildings with energy-conserving layouts, smart location, alternative transportation modes, and/or electric vehicle facilities to reduce energy consumption from both buildings and vehicle trips.
Although a few case studies showed how ZNE buildings work using monitoring data (Parker, 2009), the feasibility of net zero energy communities including vehicle energy consumption is largely unknown (Marique & Reiter, 2014), especially using empirical data. Additionally, beyond applying ZNE to new construction, it is unclear if it is feasible to expand the ZNE concept to existing buildings and neighborhoods through retrofitting buildings and adopting new technologies in renewable energy and electric vehicles. These steps will significantly contribute to reducing citywide greenhouse gas emissions from the building and transportation sectors in the future.

Given this gap in the literature, this study empirically evaluates the feasibility of net zero energy neighborhoods powered by on-site solar energy generation. This study seeks to answer the questions: (1) would it be feasible to supply the residential and vehicle energy demand of a neighborhood by on-site solar energy generation? (2) if so, what urban form and technological advances would be required to achieve this goal?

The City of San Francisco, California, is used as a case study. Using travel survey, Geographic Information Systems (GIS) and Light Detection and Ranging (LiDAR) data, we calculate available rooftop areas and vehicle miles traveled (VMT) by community residents (using a Traffic Analysis Zone as a community unit in our study) and estimate solar energy potential and vehicle energy consumption of a community. Annual household electricity and natural gas consumption data is assigned to each community unit. The net energy balance is computed using the various efficiencies of solar photovoltaics, vehicles and buildings. We also discuss the characteristics of urban form typologies that are associated with the net energy balance. This study offers insights into how city planners, urban designers and policy makers should respond to technological development when forming policies related to energy conservation and renewable energy at the community scale to ultimately achieve a zero net energy city.

References

Abstract Index #: 102
REBUILDING, RECOVERY AND RESILIENCE: INNOVATIONS IN POST-DISASTER PLANNING AFTER SANDY
Abstract System ID#: 588
Pre-organized Session: Coastal Climate Change Adaptation and Resilience

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Disaster recovery has become an increasingly salient topic for US planners, especially with the large-scale disasters of the last decade – Hurricane Ike, Hurricane Katrina, the Colorado floods, Superstorm Sandy, and others. Additionally, issues of recovery and rebuilding are simultaneously converging with an increasing acknowledgement by planners and the public of climate change induced vulnerability; recovery planning is more than ever concerned with (re)building with resilience in mind as opposed to merely replacing pre-disaster assets, land use patterns and urban systems. But though planners have in reality long been involved in disaster recovery, the knowledge base from which planners engage in recovery and resilience-building is very much still being formulated, and each new event is an opportunity to simultaneously apply lessons from the past and to create
new policies and programs applicable to the current context (Mammen 2011). This paper addresses the question of how planners can learn from past experiences, harness local strengths and assets and help communities rebuild faster, more equitably, more efficiently and more resiliently from devastating disasters (Olshansky and Johnson, 2014) through a detailed review of the policies adopted in the New York region after Superstorm Sandy.

Sandy, which struck the highly urbanized New York/New Jersey region in October of 2012, illustrates vividly how private citizens, NGO’s and government have applied innovative recovery, rebuilding and resilience strategies in a highly complex and quickly evolving environment to great effect. We report on the range of these innovations, track the historical precedents upon which post-Sandy recovery policy was based and assesses effectiveness of these tactics in facilitating recovery in New York City and New York State and in contrast to the approaches taken in neighboring New Jersey as well as in previous large-scale disasters.

While most previous recovery research has focused on a single sector (e.g. housing reconstruction, business recovery, infrastructure) this paper analyzes both top-down (i.e. government) and bottom-up (i.e. community-based, self-help) approaches across all recovery sectors. The paper synthesizes ongoing New York City fieldwork including interviews and participant observation as well as previous research by the authors after Hurricane Katrina and Hurricane Ike. We explicate the details of the many unique programs developed to address recovery and resiliency goals since Sandy including local and state small business and housing assistance programs, the $650 million New York Rising Community Reconstruction program, unprecedented federal involvement through the $1 billion Rebuild by Design program, and citizen-led efforts from neighborhood plans to micro-financing schemes. We trace the historical precedents, institutional relationships and existing policy frameworks leading to these programs in order to develop a framework for recovery policy innovation.

The research suggests that a few key attributes are instrumental in creating an atmosphere for transformative and innovative policy development around recovery planning including visionary political leadership, existing political capital allowing for effective cross-jurisdictional collaboration, governmental acknowledgement of climate-based risk, a strong civil society sector and experience with previous disaster events. The research offers lessons well beyond Sandy and the New York region, providing leading-edge best practice examples of recovery planning and detailing the ways in which capability for effective recovery and resilience-building can be integrated into all aspects of planning practice (Berke and Smith 2009).

References


Abstract Index #: 103

POLICY IS WHAT WE MAKE OF IT: AN INTERPRETIVE STUDY OF GOVERNANCE IN THE CUYAHOGA RIVER WATERSHED

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The Cuyahoga River watershed in Northeast Ohio is governed by numerous regulations and policies because of its environmental and socio-political history, and current significance to the ecology and economy of the Great Lakes region. Policy implementation takes place through the various plans, projects, and programs to restore the
ecological and economic health of the river. Several such projects and actions in the watershed are mandated under the federal Clean Water Act (among others); parts of the river are also among the 43 Great Lakes Areas of Concern (AOCs) under the United States-Canada Great Lakes Water Quality Agreement. The river has its own Remedial Action Plan Program (RAP) and a RAP committee that oversees various plans and projects aiming at delisting of the various beneficial use impairments. Three of the tributary watersheds are also Balanced Growth watersheds under the Ohio Lake Erie Commission. These policies give rise to overlapping and interconnected networks of actors that collaborate and help in policy implementation in one of the most complex watershed governance settings in the United States.

Given this background the key research questions that we are trying to address are:

1. What are various regulations and policies and their implementation structures and processes?
2. How can we identify the various interpretive communities and explore in-depth the meanings that the actors within these communities associate with the regulations and policies?
3. Who are the key actors and how do they create networks that shape collaborations?

We use a combination of ethnography, interpretive phenomenological analysis (IPA), and social network analysis in this study. For the ethnographic part of the study we carry out observations and document analysis. We conduct and analyze the interviews using an IPA approach. The social network analysis as the quantitative component of the study is used to map out the various social networks and measure network characteristics that give us key insights into the network effectiveness i.e. how these networks shape collaboration and policy implementation.

We bring together two research traditions and propose a method that combines interpretation of meanings held actors within interpretive communities with social network analysis. The proposed method can be used not only in in watershed governance related research but also in research in other policy settings. By identifying the various interpretive communities, the meanings that they associate with policies, and the points of conflict between them, we will be able to propose actions that will be useful in bridging the differences. By using social network analysis we will be able to identify the gaps in communication and information flow between actors and suggest strategies to bridge them. These results will provide insights for the public agencies, non-governmental organizations, and other participants for effective governance.

References

For many complex natural resources problems, planning and management efforts involve groups of organizations working collaboratively through networks (Agranoff, 2007; Booher & Innes, 2010). These networks sometimes involve formal roles and relationships, but often include informal elements (Edelenbos & Klijn, 2007). All of these roles and relationships undergo change in response to changes in personnel, priorities and policy. There has been considerable focus in the planning and public policy literature on describing and characterizing these networks (Mandell & Keast, 2008; Provan & Kenis, 2007). However, there has been far less research assessing how networks change and adjust in response to policy and political change. In the Australian state of Queensland, Natural Resource Management (NRM) organizations were created as lead organizations to address land and water management issues on a regional basis with Commonwealth funding and state support. In 2012, a change in state government signaled a dramatic change in policy that resulted in a significant reduction of state support and commitment. In response to this change, NRM organizations have had to adapt their networks and relationships. In this study, we examine the issues of network relationships, capacity and changing relationships over time using written surveys and focus groups with NRM CEOs, managers and planners (note: data collection events scheduled for March and April 2015). The research team will meet with each of these three groups separately, conduct an in-person survey followed by a facilitated focus group discussion. The NRM participant focus groups will also be subdivided by region, which correlates with capacity (inland/low capacity; coastal/high capacity). The findings focus on how changes in state government commitment have affected NRM networks and their relationships with state agencies. We also examine how these changes vary according to the level within the organization and the capacity of the organization. We hypothesize that:

1. NRM organizations have struggled to maintain capacity in the wake of state agency withdrawal of support;
2. NRM organizations with the lowest capacity have been most adversely affected, while some high capacity NRM organizations may have become more resilient as they have sought out other partners;
3. Network relationships at the highest levels of the organization have been affected the most by state policy change;
4. NRM relationships at the lowest levels of the organizations have changed the least, as formal relationships are replaced by informal networks and relationships.

References

VULNERABILITY OF CRITICAL INFRASTRUCTURE TO SEA LEVEL RISE AND ITS IMPACT ON COASTAL COMMUNITIES
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Pre-organized Session: Coastal Climate Change Adaptation and Resilience

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Critical infrastructures are vital to support social and economic activities. The breakdown of such infrastructures may have devastating effects on public safety and undermine community resilience (Robles et al 2008; Cutter et al 2008; Beatley 2012). Thus, it is important to understand the vulnerabilities of critical infrastructures to various threats. In literature, natural hazards, terrorist attacks and technological failures have been identified as common
threats to critical infrastructures and their impacts are frequently analyzed (Robles et al 2008). However, the threats of long term environmental changes, such as sea level rise, to critical infrastructures are not given enough attention.

Until recently, with the recognition of the reality and seriousness of climate change, sea level rise, as a threat to critical infrastructures in coastal communities has been discussed (Beatley 2012). For instance, Heberger (2009) identified significant numbers of critical infrastructures at risk with a 1.4 m sea level rise along San Francisco Bay and the pacific coast. Furthermore, as sea levels increase, the rising water will provide a higher base from which storm surges can sweep inland, resulting in an increase in frequency and magnitude of coastal extreme events (Beatley 2012). This means that the damage to coastal infrastructures, especially emergency facilities, will be significantly more destructive than before. To plan for more difficult extreme events, coastal planners need to better understand the vulnerability of emergency facilities and resulting impacts on coastal communities under different sea level rise scenarios. With limited funding and resources, it is important to address questions such as what type of emergency facilities (e.g. health care, fire and rescue station, and police station) is more vulnerable to sea level rise, and which community’s emergency services will be affected due to such vulnerability.

To answer these questions, first the definition of vulnerability for emergency infrastructures should be clarified. Robles et al (2008) and Murray & Grubesic (2007) define the vulnerability of critical infrastructure as a set of characteristics or conditions, such as geographical locations, that make the facilities susceptible to malfunction and disruptions. Majority of the existing studies use geographical location as an indicator of vulnerability to identify the number of emergency facilities at risk. Besides geographical location, other characteristics that influence the level of vulnerability should also be considered. This paper intends to bridge the aforementioned research gaps by analyzing and comparing the vulnerabilities of different emergency facilities (i.e. health care, fire and rescue station, police station) to sea level rise, considering facilities’ substitutability, potential economic loss, and relocation difficulties. A survey has been distributed to planning agencies to obtain planners’ opinions on the relative importance of these infrastructures under sea level rise scenarios. Analytical hierarchy process (AHP) is used to quantify the opinions and GIS analysis is used to identify the vulnerable facilities and estimate their spatial influence on coastal communities. The results of AHP and GIS analysis is then used to develop an integrated vulnerability index reflecting community’s overall risk relevant to the potential loss of emergency services. The results of the study will assist local coastal planners to prioritize long term protection and relocation of critical emergency infrastructures. Combined with socioeconomic characteristics analyses, the study can also help planners to identify and assist the most vulnerable community in future extreme events under sea level rise scenarios.

References

It is widely acknowledged that cities are key sites for sustainability policy, particularly in an environment where neoliberal approaches to governing and political discord prevent action at larger scales. But even while cities are receiving attention for imaginative planning and bold proposals in arenas such as climate change adaptation, actually modifying urban services and infrastructure is notoriously difficult. This paper investigates change in one realm of sustainability planning—solid waste management.

This paper presents the case of Seattle, a city regarded as a global leader in sustainable solid waste management. It seeks to understand what explains Seattle’s success in an arena where so many other cities have failed to achieve meaningful change. Taking an inductive approach using a blend of archival methods, interviews with key actors, and document and narrative analysis, the paper follows Seattle’s evolution from conventional waste management based on landfill disposal in the 1980s, to an almost unmatched diversion rate of nearly 60% today.

This paper posits that a transformation in the way the city government defined the problem of waste in Seattle explains the city’s success, rather than the specific programs it is famous for. Historically, cities have defined the problem of garbage in a variety of ways—most often as a public health problem or an aesthetic problem—but these definitions have always suggested a highly engineered collection and disposal solution, not least because sanitary engineers were the predominant experts in the field (Melosi 2005). Seattle fit this model until it hit a waste disposal crisis in the 1980s.

Under the leadership of a new director who was a policy generalist rather than an engineer, the city began to define solid waste not just as a disposal challenge—where to put the garbage—but as a series of complex social, environmental, and political problems. A wide variety of stakeholders including residents, NGOs, and the private sector were included in the public discourse around waste in the city at the time. As the definition of the problem shifted, so did the policy solutions proposed. The core of the city’s waste management program migrated from disposal to diversion, and they have continued to add and refine diversion, reduction, and reuse programs over the ensuing three decades.

Following and building on the argument that problem-definition is key to policy-making (Kingdon 1995), and that the people who define the problem have substantial power in the policy-making process (Fischer and Forester 1993; Gusfield 1981), this paper argues that the transformation in problem-definition was a key element in Seattle’s solid waste management transformation. It argues further that this transformation was made possible by the introduction of new, non-technical expertise into the problem-framing process. This more inclusive approach was a dramatic shift from prior generations of waste management in Seattle, and also represents a marked departure from traditional solid waste practice in other U.S. cities.

This case makes several contributions to planning scholarship and practice. First, it contributes to the policy and planning literature on the significance of problem framing in policy-making processes by exploring the role of professional frames and expertise in problem-definition. More broadly for planning practice, the case suggests that opening infrastructural debates to non-technical experts will not necessarily lead to intransigent NIMBY-ism; rather, the inclusion of non-technical expertise—even in the absence of formal mediated processes—can lead to transformative action in technical arenas. This finding is especially important given the highly political and contested threats emerging as a result of climate change for which strictly technical solutions generated by technocratic expertise may never be politically viable.

References
The Clean Water Act (CWA) of 1972 requires states to develop total maximum daily loads (TMDLs) for surface waters not expected to comply with water quality standards after controls have been put in place to address point sources of pollution. These TMDLs have gained attention as localities and their states increasingly recognize nonpoint sources of water pollution as an intractable challenge (Hoornbeek et al. 2013). The 1987 amendments to the CWA created the Section 319 Nonpoint Source Management Program overseen by the US Environmental Protection Agency (USEPA). This program provides states, territories and tribes with grant money that “supports a wide variety of activities including technical assistance, financial assistance, education, training, technology transfer, demonstration projects and monitoring to assess the success of specific nonpoint source implementation projects” (http://water.epa.gov/polwaste/nps/cwatc.t.cfm). In order for projects to qualify for Section 319 money, they must be linked to a watershed plan that enumerates TMDL reduction. The USEPA has further established 9 minimum elements for watershed-based plans that must be developed prior to implementation of any projects funded with Section 319 grant money. While new watershed plans do not have to be created, all watershed plans must be approved as having addressed the minimum elements.

The plan quality evaluation literature shows a clear relationship between plan content and the presumed impact of the included policies (see, e.g., primary source listing). As discussed by Berke and Godschalk (2009), “plan quality evaluation thus functions as a learning process that yields important planning lessons and guidelines” (p. 228). Therefore, to understand the relative value of watershed plans versus standards of good practice, researchers developed an evaluation instrument using the parameters set forth from the plan evaluation literature in light of the specific context of the USEPA’s minimum elements for watershed-based plans (Conroy, Dyckman, and White, forthcoming). The instrument serves as the framework for the analysis of plans for this study.

This study builds from a pilot analysis of the role of planners in watershed planning and uses watershed plans in Ohio as the study population. There are 54 approved watershed plans dating from 2002 to 2014. An initial review of the plans for general content and scope considerations demonstrates a basic level of variation. The watershed plans ranged from 67 pages to 846, averaging 265 pages; plan length is not an indicator of quality in and of itself, though this range may indicate content depth diversity. Watershed drainage area ranged from 14mi2 to 1381mi2 (average 223mi2), while the percent urban varied from less than 1% to over 86%. While these components may influence plan evaluation score variation, additional considerations based on prior plan evaluation studies may also impact scores including population change and median income. Further, based on Conroy (forthcoming), watershed plan quality may also be effected by the inclusion of a professional planner during plan development as well as connection of the plan to local comprehensive plans.

This paper begins with a discussion of the proposed watershed plan evaluation framework, a summary of its development and its place within the broader plan evaluation literature. Next, the paper examines the application of the framework to a sample of the approved watershed plans in Ohio. Analysis of the evaluation results, variations and comparisons follow. The paper concludes with an assessment of the potential policy implications of the results and directions for future research. The results of this paper are important to ongoing efforts to improve and protect surface water quality in the U.S. For planners, establishing an appropriate evaluation method will enhance the success of future watershed plans.
JUSTICE AND THE CITY: (RE)EXAMINING THE PAST TO CREATE THE FUTURE
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References


Abstract Index #: 108

LOCAL STRATEGIES TO PREPARE FOR CLIMATE CHANGE: AN IN-DEPTH ANALYSIS OF ACTIONS INCLUDED IN U.S. LOCAL CLIMATE ADAPTATION PLANS

Abstract System ID#: 676

Individual Paper

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The impacts of a changing climate, including droughts, floods, and heat waves are becoming more intense and occurring more frequently in communities throughout the U.S. and across the globe. Historically, climate change work at the local level has focused on climate mitigation, however, over the last 7-8 years there has been growing movement to ensure that communities are preparing for the impacts of existing as well as future changes in climate, known as climate adaptation. One way this is happening is through the creation of stand-alone climate adaptation, climate resilience, or climate preparedness plans. These plans generally identify the key vulnerabilities a community is likely to face, the vision or goals the community has that could be affected by climate change, and the strategies the community proposes to reduce vulnerabilities and build resilience. What is unknown, however, is what types of strategies or actions local communities are determining to be key to increasing their resilience and thereby, including in their plans.

This research addresses this gap by systematically analyzing the strategies recommended in 43 U.S. local adaptation plans. This sample represents all publicly available plans as of December 2014 that focus on adaptation, take a comprehensive approach to the issue (i.e., are not sector specific), and are written by/municipal and county governments. Strategies in each plan were identified and preliminarily categorized into one of thirteen categories commonly used in the adaptation literature: capacity building, advocacy, information and awareness, research and monitoring, planning, practice and behavior, policy and legislation, physical infrastructure, building codes and engineering design standards, green infrastructure, land use, financing, and technology. Next, a semi-grounded theory analysis was conducted whereby all the strategies were regrouped based on similarities, allowing for new categories of strategies to emerge. Finally, multivariate modeling was used to determine if factors such as community income and education level, population growth in the last decade, existence of state planning mandates, and the types of stakeholders engaged in the planning process influenced the number and types of strategies included in adaptation plans.

Results indicate that capacity building, research and monitoring, planning, and practice and behavior strategies are the most common across plans. However, results also show a wide range in the total number, types, and depth of strategies included in the plans analyzed. Multivariate modeling results indicate that household income and the types of stakeholders included in plan preparation are important factors explaining why certain types of strategies are included or excluded in local adaptation plans. Overall, the focus on capacity building, research and monitoring, and planning indicate that most communities are still in the early stages of adaptation planning and action. Going forward, these results will need to be confirmed by assessing what actions these communities are actually implementing.
The American Planning Association has repeatedly noted that climate change is a key concern for the organization, its members, and citizens around the world. This is further evidenced by their creation of a special track at the 2015 APA National Conference dedicated to the issue. As planners and communities around the U.S. strive to find ways to build their resilience to extreme weather and climate change, it will be imperative to understand what adaptation vanguards have done, what lessons they have learned, and how others can leverage these experiences to ensure the communities are prepared for climate change. Having this knowledge will help both practitioners and scholars more effectively develop effective and contextually relevant approaches to building a more resilient society. The results from this research provide a foundation for future scholarship, including work to understand the types of adaptation actions being implemented and how effective these strategies are at reaching community-defined resilience or vulnerability reduction goals.

References


Abstract Index #: 109

SUSTAINABILITY ASSESSMENT OF URBAN UNIVERSITIES AS SMALL-SCALE URBAN SYSTEMS: A CASE STUDY OF UNIVERSITY OF ILLINOIS AT CHICAGO

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Individual Paper

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As an analogy to the metabolic process in ecological systems, the concept of “urban metabolism” (UM) connects inputs with outputs of urban systems and thus facilitates the identification of inefficiencies in operation for long-term planning processes. Since the term of UM was first coined by Abel Wolman in 1965, many studies have adopted and advanced this concept for urban sustainability analysis. However, data limitations have been consistently identified as a primary barrier for implementing empirical analysis, validating quantitative methods, and revealing policy references (Niza et al., 2009).

This study aimed to develop a proof of concept of UM with empirical data by examining urban universities as small-scale urban systems. In many ways urban universities share the same characteristics as cities, given their large stocks and flows of people, materials, and finance. New students enroll and senior students graduate every year; faculty, staff, and students living off-campus need to commute between campus and residence every day; new financial resources may be obtained and existing funding is expended; materials and energy are consumed; wastewater, air emissions, and solid waste are generated from office buildings, research labs, classrooms, student dorms, restaurants, medical centers, and recreational centers. Such information, especially those about public universities, are often accessible. From both theoretical and practical perspectives, urban universities
provide valuable opportunities of promoting our understanding of complex components in an urban system and validating the models of urban sustainability and resiliency in both quantitative and qualitative ways.

To illustrate the proof of concept in urban universities, this study identified and collected “metabolic” relevant data (e.g., enrollment, graduation rates, human resources, fees and revenues) that generally characterize higher education institutions in national databases (such as the Integrated Postsecondary Education Data System) from 1990 to 2014. Environmental data (e.g., air emissions, material recycling, and wastewater), which are not as commonly available as institutional data, were collected and modeled on the campus of the University of Illinois at Chicago (UIC) (Klein-Banai & Theis, 2010). Based on this integrated set of data at UIC, multi-disciplinary methods of system analysis, such as Fisher Information (see Gonzalez-Mejia et al., 2012) and Data Envelopment Analysis (see Bian et al., 2014), were explored and evaluated. This study concluded with discussions about the strengths and weaknesses of these system methods in terms of measuring system performance and identifying the “limiting factor(s)” that play a major role in the sustainability and resiliency of urban universities. While the case illustration is for one specific university (UIC), the proposed framework of analysis and methods are applicable in other universities and small-scale communities where data analysis can be connected directly with planning intervention.

References

Abstract Index #: 110
ADAPTING VERNACULAR WATER SYSTEMS TO TEXAS WATER SUPPLY PLANNING
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Individual Paper

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Texas’s water demand exceeds supply with projected water demand increasing by 22 percent over the next fifty years (TWDB 2012). In order to build water system resiliency in the context of climate change and increasing human population, Texas water planners and regional water planning groups will continue to identify and secure additional water supplies, in addition to decreasing demand through conservation (TWDB 2012).

Texas uses a statewide water supply planning process created by the state legislature in the 1950s; in 1997, the state legislature restructured water planning to a distributed process based on 16 regional water planning groups, each comprised of representatives from 11 different citizen groups (TWDB 2012). Texas state water planning, although imperfect, has been considered a model for other states, due to its regional focus, statewide reach, participatory nature, and funding and implementation structure (New Mexico Interstate Stream Commission 2009, Tennessee Advisory Commission on Intergovernmental Relations 2010).

Since the 1950s, Texas state water planning has been dominated by large-scale, expensive, heavily engineered water strategies such as dams, reservoirs and inter-basin transfers (TWDB 2012, Luering 2014). The Texas state water plan projects that a water supply portfolio consisting of these strategies alone is unlikely to meet demand (TWDB 2012). Texas’ planning process potentially allows an opportunity to address this gap in sufficient water supply strategies, as it allows for each regional water planning group to recommend regionally appropriate water strategies, which can then be incorporated into the state water plan and potentially funded. For instance, the
current state funding pool prioritizes water strategies focused on conservation and innovation (Brown 2014), providing an opportunity for regional water planning groups to recommend and receive funding for water strategies that differ from the recent history of large-scale, expensive strategies. Despite this opportunity, doubt remains about the feasibility of incorporating innovative, conservation-based water strategies into the water planning process (Leuring 2014).

Vernacular water systems—historic, context-specific water supply strategies that combine physical technologies with governance and management systems—offer ideas for resilient, affordable water supply strategies that could fit within the Texas state water planning process. Given Texas’ older tradition of diverse water strategies inspired by a range of cultural traditions (e.g., Spanish, English, German, Native American) (Porter 2009), this paper asks if vernacular water systems may provide one way to bridge the gap that exists between Texas’ recent history of top-down, heavily engineered water strategies, its longer history of diverse, distributed water systems, and its urgent need to match water supply with projected demand.

I used Yale University’s Human Relations Area Files (HRAF) database to identify 1,012 records of vernacular water systems from around the world, based on empirical data gathered from across the disciplines. I then analyzed these water systems using an analytic framework that I developed from Integrated Water Resources Management (IWRM), which is considered to be the gold standard for water planning at the watershed scale (United Nations 2002; WWAP 2009; GWP 2014; Pahl-Wostl 2007). I used this modified IWRM analytic framework to characterize each vernacular water system in terms of watershed characteristics, ecological characteristics, water technologies, management systems, governance systems, and drivers of water system changes. Lastly, I applied the results of this analysis to Texas by selecting vernacular water strategies that matched characteristics of the Texas water planning context, such as climate, spatial scale, and type of water use, among other characteristics. This analysis allowed me to evaluate how vernacular water systems might be adapted to provide equitable, efficient, and effective water management in Texas.

References


NOT ON MY BAYOU: PUBLIC SPACE, PRIVILEGE AND PERCEPTION

While the public realm suggests a good jointly shared by all, the claims and use of these spaces by varied groups often elicits tension, conflict and exclusion. This is particularly true when a neighborhood public space becomes heavily used, or a popular destination to those living outside the immediate area (Webster 2002). There are many reasons for this tension. While public space creates opportunities for communities to define their collective…
identity and interests, there is also power in shaping which aspects of the community are emphasized (Loukaitou-Sideris and Ehrenfeucht 2009, Zukin 2010). At the neighborhood scale, property owners’ interests in defining community character and limiting use through the management of public space often conflict with the interests of the users of the space and the community as a whole. For adjacent property owners, there are de facto property rights related to the proximity of neighborhood public space. Oftentimes these owners will try to protect their real or perceived property values through regulating the public realm (Webster 2002). In addition to property interests, there are also emotional/psychological dimensions associated with people’s interactions with their community and public space. While Manzo and Perkins (2006) found that the emotional neighborhood connection impacts behavior and encourages positive participation in neighborhood processes. In contrast, studies have also shown that anything that changes the community may be perceived as a threat when there is an emotional connection, and thus members of the community will resist any change regardless of its potential value to the neighborhood and community (Forester 1987).

This research examines how a small group of residents claimed and attempted to control an increasingly popular neighborhood park in New Orleans. In 2013-2014, this coalition initiated a master planning process focused on the public spaces of Bayou St. John. This waterway, running through the middle of the City, has historically been a public park open to all residents. While it has primarily benefitted those living in close proximity, increased use and recent large-scale events have caused conflict between long-term neighborhood residents and perceived newcomers, as well as non-neighborhood residents. Utilizing narratives of environmental protection and the tools of urban planning, the group coalesced to claim property rights and exclude various uses from the public space along the Bayou. Although the coalition met resistance from neighboring communities, the effort was illustrative of a new strain of neighborhood NIMBYism utilizing environmental protection and democratic planning discourses to structure an exclusive public realm.

While many have studied interactions in public space, the processes through which places are claimed, controlled and contested has received less attention. As this study reveals, understanding how, why, and with what limitations neighborhood residents attempt to manage the Bayou’s use sheds light on how public space is claimed and the conflicts triggered by those claims. Although the struggle for control of the public realm is not new, this paper uncovers the use of narratives associated with common goods and inclusive processes to claim power and exclusivity. Utilizing multiple qualitative methods, including interviews with residents, city planners, and coalition members, this research interrogates the narratives surrounding the management of public space.

References


Abstract Index #: 112
WHAT DOES EQUITY LOOK LIKE? CREATING AN ENVIRONMENTAL INDEX TO MEASURE EQUITY IN GREEN STORMWATER INFRASTRUCTURE INVESTMENTS
Abstract System ID#: 711
Individual Paper

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The three Es of sustainability are frequently used as the metric by which sustainability planning is measured. However, the term equity is not well defined. What does equity in sustainability planning look like? Does equity mean that we distribute resources evenly across different communities or does it mean that we target investment in low-income communities where people are currently not receiving the same level of amenities? As we start to recognize that sustainability initiatives like green infrastructure provide social, economic, and environmental benefits, how should we distribute those benefits in the urban environment and who should pay? This paper examines the literature on equity planning and “just sustainability” to look for clues for how we should be conceiving of equity in sustainability planning (Krumholz, 1997, Agyeman and Evans, 2003, and Cambell, 1996).

Focusing on green infrastructure planning in the City of Philadelphia, the authors developed a GreenPhilly Community Advisory Board to create guidelines for how green infrastructure can be used to promote equity in the city. These guidelines address questions about what existing conditions should be considered when measuring equity (such as existence of specific types of environmental amenities or disamenities) and also consider whether an equitable distribution is necessarily an equal one (as often seems to be implied in many discussions of equitable planning). Using these guidelines, the authors created a GIS-based based index of environmental disadvantage which can serve as a decision-support tool for siting new green infrastructure. By determining what factors are important for equity and how green infrastructure can promote equity (at the same time that it meets environmental goals), the decision-support tool can help decision-makers more carefully evaluate the equity implications of their green infrastructure siting decisions.

References
this paper, we are focused on county-level wetland resource management and are looking to a set of rules used by managers (planners, zoning administrators), including the county comprehensive plan, the zoning ordinance, and land or subdivision regulations. We have created an evaluation tool to examine the rules embedded in these documents that address wetlands.

We expect to find among the seventy-two counties a range of rules to address wetland protection, and a set of rules that are more robust in some counties than in others. This work will help to identify case studies so we can examine a broader set of federal, state and local rules. Like Magyera and Genskow, Owens and Zimmerman focused on subnational or state level analysis, but by drilling down to county-level analysis, we expect to reveal a deeper understanding of local governance and its impact on an important resource: wetlands.

References

Abstract Index #: 114

PLANNING FOR CLIMATE CHANGE WHERE SUSTAINABILITY AND RESILIENCY ARE TABOO

While the scientific evidence in support of anthropogenic climate change is overwhelming, politics and public beliefs surrounding climate change in the United States remain quite contentious and have limited action on the federal level. As a result, cities are touted as promising leaders to address climate change. Numerous studies have described climate actions in large cities that have been active for some time, such as Chicago, New York, and Seattle. Some recent studies have also included smaller cities and those that are new entries to climate planning. These studies find that political leadership, such as a mayor committed to climate action, institutional capacity, such as staff dedicated to climate issues, access to financial and technical resources, and engagement of key stakeholders and citizens through collaborative planning processes are instrumental for both climate change planning and implementation (e.g., Pitt and Bassett, 2013). However, relatively little attention has been paid to cities and regions lacking political, institutional, and citizen support for climate change.

This paper reports on municipal planning activities in the Dallas-Fort Worth (DFW) region to help fill this gap and learn more about climate change planning in non-leader cities. The majority of municipalities in DFW are not discussing or planning for climate change in explicit or significant ways. At best, municipal staff may attempt to address related concerns, such as air quality or energy efficiency, by minimizing environmental discourse in favor of a discourse centered on economic benefits. At worst, planning related to climate change is absent and discussion of sustainability and resiliency concepts are challenged in the political and planning processes. This paper examines the discourse around climate change and related environmental planning projects by analyzing the role of politics, the use of collaborative participation and education of the public, and implementation of environmental planning goals.

Data are drawn from planning documents, news accounts, and in-depth interviews with planning staff, elected officials, and citizen volunteers participating in environmental planning projects in two cities in DFW. One city experienced significant opposition to sustainability planning several years ago, and subsequent planning efforts
are analyzed to determine how environmental planning discourse changed in light of this opposition. The other city has not experienced opposition to similar sustainability planning, and preliminary interviews with planning staff indicate the purposeful construction of a discourse that avoids controversial topics, including climate change.

There is certainly merit in highlighting economic and other benefits to environmental planning and in framing controversial issues in a manner sensitive to local contexts (Whittemore, 2013). However, likely climate change impacts suggest the need for at least some direct discussion and opportunities for public involvement. Increased education of the public on climate change may help facilitate the behavior changes necessary to mitigate and adapt to climate change, and planners are well positioned to contribute to this educational process (Wheeler, Randolph, and London, 2009). Additionally, a more informed and involved citizenry can help build the political and institutional support necessary for successful and collaborative climate action planning (Hamin, Gurran, and Emlinger, 2014).

References

Abstract Index #: 115
PLANNING FOR YOUNG PEOPLE'S ACCESS TO PARKS: AN ENVIRONMENTAL JUSTICE INVESTIGATION OF DENVER, COLORADO
Abstract System ID#: 817
Individual Paper

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Research conducted in several Western countries shows that the time young people spend playing in nature is constantly decreasing. This decrease is problematic, given the benefits of contact with nature for mental and physical health among young people. In urban areas, young people mostly rely on neighborhood parks, a form of public green infrastructure, for accessing nature. However, a recent review showed that low-income young people of color have even less contact with nature than other young people due to lack of available parks in their communities (NRPA, 2011).

Building on previous studies on access to parks (Boone et al., 2005; Rigolon & Flohr, 2014; Wolch et al., 2005), I investigate how planning policies and practices in Denver, Colorado affected the way young people from different demographic groups can access public parks. In this study, I employ an environmental justice lens to study access to parks, including the focus on the just distribution of parks and just decision-making processes to determine where parks are located (Schlosberg, 2004). However, limited research on access to parks has focused on just processes and just distributions (e.g. Boone et al., 2009) and no previous study included young people’s views of parks to study the distribution of high-quality parks. Therefore, this research stems from a research question that includes aspects of procedural and distributional justice and park quality: In Denver, CO, what policies and practices have resulted in the current spatial distribution and quality of public parks for young people of different SES and ethnicity? Denver, a city that is experiencing significant population growth and that includes substantial ethnic and socio-economic diversity, is an ideal case study for this research.
In this research, I employ a mixed methods approach to uncover how park planning, land use planning, and housing policies and practices in Denver have influenced the current equity or inequity of the distribution of parks, with a specific focus on parks with high-quality amenities for young people. To do so, I combine a Geographic Information Systems spatial analysis to measure the spatial distribution of parks (quantitative) with a historical process analysis based on interviews and secondary data (qualitative).

My preliminary findings show that land use policies favoring residential segregation, combined with park planning practices favoring large city parks over diffused pocket parks, contributed to today's spatial inequities in the distribution of parks, and to low-income young people of color having even less access to high-quality parks. In particular, exclusionary zoning, redlining, and restrictive covenants contributed to excluding African Americans and Hispanics from park-rich areas.

In terms of practice, these findings show that when evaluating park systems, planners need to go beyond basic parameters like general park acreage and park distance, and to look at more complex parameters that consider park quality in relation to different users. Also, these findings show the importance of studying the intersections of park planning, land use planning and housing policies when studying access to parks.

References

Abstract Index #: 116
LANDSCAPES OF ENVIRONMENTAL JUSTICE: AN ANALYSIS OF ECOLOGICAL STRUCTURES AND COMMUNITY VULNERABILITIES
Abstract System ID#: 819
Individual Paper

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Although the American school of environmental justice is place-bound due to the dominance of distributive justice in this field; recent human health paradigms argue that health cannot be characterized by a single environmental hazard or pollution point; instead, health status should be described as a result of complex interrelations between socioeconomic and environmental factors (e.g. Tarocco, Amoruso, Caravello, 2011). Many scholars argue that these interrelations put an emphasis on the study of access to environmental services and environmental health which requires an understanding of both biophysical/ecological and human factors.

Building upon the previous research on urban ecosystems (e.g. Alberti et al. 2003), this paper examines urban landscapes as being composed of multiple land uses and covers that operate in “chain-linked ways,” where spatial configurations and interactions in each landscape lead to dissimilar states of environmental health/justice (Turner, Lambin, Reenberg, 2007, p. 20668). Employing such a landscape approach results in an understanding of urban areas as “ecological spaces” (Braun, 2005, p. 635).

Therefore, this paper, first, provides an analysis of both spatial and temporal changes in urban landscapes in south Dallas. I introduce a set of indicators for environmental health (e.g. aggregation, shape, proximity, diversity,
and dominance and Shannon index) and vulnerability in the community including the extent of (potential) exposure to environmental health hazards and coping capacity. Furthermore, a series of environmental quality indices will be assigned to each landscape (e.g. air pollution and human health conditions). The Average Ecological Quality (AEQ) score assigned to each landscape will ultimately be used to study the patterns of health risk disparities through a comparison of different landscapes at different time periods, identifying the change processes. However, these metrics cannot directly be used as indicators of environmental health; rather they will be used along with other GIS data such as soil, water, and pollutants and human factors.

Second, in regard to human factors, borrowing from previous EJ studies (e.g. Harner, Warner, Pierce, Huber, 2002), I apply the following indicators: Comparative Environmental Risk Index, Toxic Demographic Difference Index, Toxic Demographic Quotient Index, Toxic Concentration Equity Index, Concentration Risk Comparison Index, Concentration Demographics Index, and Toxicity Equity Index. The two sets of factors introduced in this paper all analyze different environmental risks in the context of the socioeconomic status of the area and are the starting point for analyzing the community’s vulnerability and environmental injustices.

References


Abstract Index #: 117
SOCIAL EQUITY AND CLIMATE ACTION: IS DISTRICT-SCALE SUSTAINABILITY THE LINK?
Abstract System ID#: 832
Pre-organized Session: Justice, Sustainability & the City: Possible Paths

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In one of the most cited articles in JAPA, Scott Campbell (1996) points out the fundamental contradictions among three aspects of sustainability—environment, equity and economy. Indeed, concern about environmental action overwhelming equity concerns emerged early in the environmental movement. In New York City’s first Earth Day celebration, Senator Jacob Javits (D. N.Y.) expressed concern to the audience that the new and intense focus on the environment would supersede action on poverty and racial tensions and access to social services. Similar concerns were expressed by top administrators at the Dept. of Housing and Urban Development in 1970 and 1971 (cited in Connolly, forthcoming). Numerous articles have corroborated Campbell, demonstrating that economy also wins out over equity when conflict over land use or goals exists (Fitzgerald, 2010; Portney, 2013). Advocates of an emerging approach to sustainability planning—district-scale sustainability—maintain it can simultaneously achieve all three aspects. Although the concept is evolving, district-scale sustainability refers to concentrating state-of-the-art technologies in green building, smart infrastructure and renewable energy to create sustainable, resilient and inclusive districts that accelerate action on climate change and sustainability (Fitzgerald and Lenhart, forthcoming). Many practitioners see this approach as the “sweet spot” between building and the city in achieving sustainability and climate action goals. Several private foundations are funding these initiatives and are especially interested in their ability to achieve equity goals.
While there is a nascent literature examining the extent to which climate action goals are being achieved through district-scale initiatives (Fitzgerald and Lenhart, forthcoming; Sussman, 2012; Rutheford, 2008), there is considerable criticism of what they have achieved on the equity front. Critics of several highly acclaimed European districts suggest that they are nothing more than eco-branding at best and at worst create eco-gentrification (Checker, 2011; Dooling, 2008; Rutheford, 2008). In North America, Quaset (2009) argues that Vancouver’s eco-density policy has brought ecology and gentrification together as explicit government policy.

In a project that builds on the paper I presented at ACSP last year, I examine four emerging district-scale initiatives emerging in North America to examine the extent to which they have been able to achieve environmental goals without gentrifying the new green neighborhoods. The approaches are LEED-ND, Enterprise Green Communities, EcoDistricts and Green Zones.

The first step in the research was to conduct a scan of all district-scale approaches operating in the US. This was achieved by interviewing officers from six foundations that fund district-scale work, interviewing practitioners associated with the initiatives and then confirming a final list of more than 12 distinct approaches with the two organizations that funded the research. The next step was to examine organization websites, interview representatives from the organizations, from community organizations in the district and city staff involved with or aware of the project. Four research questions guided the interviews and analysis:

1. Is equity/social justice built into the model’s approach?
2. To what extent are citizens engaged in the planning process?
3. Which models have avoided or resolved property conflicts related to gentrification?
4. Has implementation resulted in eco-gentrification?

Additional interviews were conducted following a snowball sampling method. The interviews were reconstructed into narratives that while three of the four approaches have equity built into their goals, the “three E’s” of sustainability have been achieved through all. But there is considerable overlap in that three of the four approaches have been implemented as complementary strategies in several cities. Although the potential for true sustainability exists in district-scale approaches, its realization is a function of the goals of city planners and organizations charged with implementation.

References
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One in six Americans are food insecure. Meanwhile, 70 billion pounds of food products are discarded each year and food waste is the largest component of municipal solid waste disposal (Feeding America, 2012; US EPA, 2014). Widespread increases in waste disposal fees have urged many communities to implement or consider local programs of food waste reduction and recycling (Levis et al., 2010). Alternatives to landfilling, including source
reduction, donation to food pantries, use for animal feed or industrial feedstock, and composting, can recover usable products and energy, reduce disposal volumes and cost, and reduce greenhouse gas emissions and climate change impacts (US EPA, 2012; Vermeulen et al., 2012).

In practice, existing programs of food waste management (FWM) have largely focused on composting as the only option for landfill diversion. In addition, food discards are only collected from large food waste generators (e.g., supermarkets, educational institutions, hospitals, commercial food wholesalers, and distributors) for regulatory and economic reasons. There are missed opportunities of involving small food waste generators (e.g., households, coffee shops, and neighborhood convenience stores). While they do not generate significant volumes of food waste individually, there could be considerable economies of scale when they are partnered with surrounding entities and communities.

This study aims to promote participatory approaches to food waste reduction, reuse, and recovery at the neighborhood level. In particular, this study focuses on small food waste generators whose participation in sustainable FWM may be currently hindered by data constraints and volume concerns. FWM is a local practice and necessitates robust data that incorporate site-specific characteristics, provide essential references to various technical choices, connect individual organizations and communities in linked partnerships, and realistically reflect local market dynamics. However, there is a missing link between food scrap generation and potential uses (e.g., food donation, animal feed, and industrial reuse). Moreover, the most fundamental information for FWM, namely, food scrap quantity and quality, composition, and spatial distribution, is not commonly collected at the source.

To address the data gaps, this study proposes a food waste modeling approach for urban neighborhoods, where the density and diversity of daily activities provide important potentials for alternative FWM strategies. The generic model quantifies food waste generation (supply) from mixed categories of land uses and can be adapted in a specific neighborhood. Furthermore, the model identifies the demand from potential markets for food reuse and recovery with integrated goals of social equity, economic efficiency, and environmental sustainability. Industry news and market reports have been compiled for default values in the generic model. Key planning data, such as the number of housing units, the number of employees, and building square footage, are used to refine food waste generation modeling that reflects the characteristics of individual neighborhoods.

The theoretical model is implemented in an urban neighborhood in Chicago. The case study illustrates the potential benefits of fostering collaboration among businesses, institutions, and residents as community consortia for food waste reuse and recovery, especially if large food waste generators (e.g., an urban university, large company, or supermarket) can serve as the local anchor of waste collection, recycling, and education. The case study also discusses the potential opportunities of participatory planning for helping fill in the data gaps that are critical for sustainable FWM practices.

References
Although the recent explosion in unconventional oil and gas extraction mostly through hydraulic fracturing ("fracking") has improved US energy security and sufficiency, the industry has caused severe environmental problems and negative economic impacts in fracking communities including contamination, strains on local infrastructure, and threats to public safety. However, the social impact of fracking has received little attention, especially in vulnerable communities of color. In my research, I seek to understand a poorly understood paradox characteristic in these communities: even though minority residents are disproportionately and severely affected by fossil fuel extraction, there has been little or no organized protest against fracking. I situate this research in low-income colonia communities in South Texas’ Eagle Ford Shale formation, a Mexican American border landscape that has been severely impacted by the fracking industry but where overt resistance to fracking is uncommon. Texas has been at the forefront of shale oil and natural gas production since the 1930s. With the advent of improved hydraulic fracturing technologies in the mid-2000s coupled with increased market demand and supportive legislation, shale oil production in South Texas has increased exponentially in the span of 4 years, with similar growth in natural gas production rates during the same period (EIA 2014). Research on the fracking industry in Texas has focused on strained water resources, air and water contamination, earthquakes and infrastructure implications; and pressures on local governments to provide adequate public safety, health and welfare regulations and services. However, critical examinations of the racialized geographies of fracking, and their implications for just and sustainable environmental planning, is missing from this research area and will thus be examined and explored in this paper.

In my research, I seek to understand how constructions of race, culture, and landscape may influence local, regional and state energy planning and policies and community responses to fracking in border colonias. I ask the following research questions: What local, state, and national actors and processes shape the fracking industry in colonias? How does fracking shape everyday experiences and produce racialized landscape in colonias? What are the responses to the fracking industry in colonias by residents, civil society organizers, and others?

I am conducting multi-sited ethnography informed by post-structural political ecology (Finewood and Stroup, 2013; see also Heynen 2003; Heynen, et al., 2006) and environmental justice (Agyeman, Bullard, and Evans, 2002) to better understand the spatialized expressions and implications of fracking, and critical race theory and Chican@ epistemologies, in particular the work of Laura Pulido and Devon Peña, to unpack the racial complexities on the Texas-Mexico border. To investigate the actors and processes that shape fracking in Texas, I am interviewing officials, industry officials, and activists and I am documenting extractive industry legislation during the 2015 Texas State Legislative Session. I am also conducting archival research in order to analyze property deeds in relation to mineral rights, and I am analyzing historical changes in the legal codes and legislation governing the oil and gas industry and colonia planning and development. To document how fracking shapes everyday experiences and produce racialized landscape in colonias, I am conducting GIS analysis coupled with interviews and participant observations with residents and community leaders. And to document responses to the fracking industry, including any forms of organizing and protest, I am conducting participant observations and informal interviews with organizers and residents. I will conclude by discussing how this interdisciplinary research can contribute to theory, practice, and ultimately offer policy and planning recommendations to prevent the further marginalization of border colonias and other vulnerable communities impacted by fracking.

References


Abstract Index #: 120

ANALYSIS OF RESPONSES OF RURAL WATER USERS TO WATER TRANSFERS IN THE CONTEXT OF TAMIL NADU, INDIA

Abstract System ID#: 879
Individual Paper

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This paper analyses the responses of water users in the rural regions to the rural-urban water transfer practices in a selected case in India, to gain insight into the inter- and cross-scale dynamics of such responses, and to explore how rural and urban regions can adjust and mutually support each other in the water transfer processes.

Water transfers, implemented to meet the growing urban water demands, are typically analyzed based on simplified models. Cities in developing countries, particularly in India, frequently appropriate water from distant and largely rural supplies originally purposed for irrigation to meet the demand for water. When water is in short supply relative to demand in water supplying regions, rural-urban water transfers have multiple consequences both direct and secondary in the water supplying rural regions. Often, the impacts depend on the way water transfers are implemented, the way the supplying region responds to changes in water availability and the kind of management mechanisms governments put in place to assist farmers managing this transition. However, past empirical inquiries regarding the impact of water transfers on preexisting uses in water supplying regions ignore these intervening or modifying mechanisms, and as a result, present contrasting results.

Issues associated with water can be analyzed from multiple perspectives. As water and social systems are inextricably interlinked, this study aims to bring together many interrelated variables in the social systems in the analysis and synthesize their complex dynamics of change in the chosen water transfer case in the state of Tamil Nadu, India. Specifically, this research analyzes how people and nature organize around change by focusing upon the individual and societal responses that rural-urban water transfers induce, and the social, institutional and ecological feedback effects they provoke. Literature on adaptive capacity and social-ecological systems informs the identification of pertinent variables in this study.

This study employed a mixed method approach to capture the complexity of the response process. The analysis involved the following steps. First, diverse responses of farmers were analyzed in terms of whether they were coping or adaptation mechanisms to the perceived or actual changes. Then, association between different farmers’ characteristics and their responses were analyzed quantitatively to identify the characteristics highly influencing the responses. Next, qualitative interview data is used to capture the processes that influence the response capacity of farmers and the feedback mechanism at different scales. Based on the analysis, the characteristics of the response space and its implication at other scales as well as for the future of the rural areas are interpreted.

The results demonstrate that the study area is characterized by heterogeneous farmers with different levels of response capacity resulting in different forms of responses. The diverse responses by farmers help in the adaptive maintenance of agricultural activities in the region and show the resiliency of individuals in the face of change. However, these responses, mostly short-term coping strategies, do not improve their resiliency for future shocks and reinforce the existing undesirable system attributes that may lead to unplanned transformation in the near future.

Depending on the continuity or change of responses by farmers, the study region may follow different future trajectories. To explore the various future possibilities, three plausible scenarios and planning recommendations
are presented. How the rural regions can make internal adjustments and urban regions can interact with rural regions and enhance the resilience in return for using water from rural regions is explored in these scenarios. The narratives of alternate possibilities pave the way for development of support measures and policies. The insights and solutions developed in this study may be extended to other places and developmental activities in developing countries exhibiting similar characteristics.

References

Abstract Index #: 121
CAN WE REBUILD BY DESIGN? AN ASSESSMENT OF RECOVERY THROUGH COMPETITION IN POST-SANDY NEW YORK
Abstract System ID#: 884
Individual Paper
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Rebuild by Design (RBD) began in the summer of 2013 as the principal federal response to the fallout from Superstorm Sandy. The competition explicitly sought to redefine the federal approach to disaster recovery. Rather than pursuing recovery through reconstruction, RBD aimed to realize recovery through competition. It also implicitly pursued an agenda of climate change adaptation, capitalizing on the imprimatur of crisis to neutralize an otherwise obstinate set of political constraints around the issue. This paper seeks to assess the merits of RBD’s recovery through competition model and to relate its various challenges and successes back towards the larger policy question: how should cities prepare for and respond to disaster?

RBD was structured as a four-stage, interdisciplinary design competition and its primary goal was to “promote innovation by developing regionally-scalable but locally contextual solutions that increase resilience in the [New York] region.” The first stage involved an international RFP and it resulted in the selection of ten teams comprised of urban designers, city planners, civil engineers, ecologists and others to participate in the competition. The second stage assigned each team a unique set of sites along the region’s coastline to research and begin engaging in the planning process. The third and fourth stages challenged each team to develop a series of design and policy interventions that could be scaled up from a single site throughout the rest of the region. The proposals generated during this final stage were then reviewed by a national jury of planning, design, and public policy experts and, in the summer of 2014, six proposals were selected for further refinement and implementation. Each received a share of nearly $1 billion in Community Development Block Grant Disaster Recovery funding.

The recovery-through competition model of RBD represents a novel approach to disaster recovery that merits greater attention from scholars. The U.S. Department of Housing and Urban Development has already moved to nationalize the model via its National Disaster Resilience Competition. Yet relatively little is known about the successes and challenges of the RBD outside of the tightly-controlled coverage provided by the popular press. This paper aims to complicate the narrative surrounding RBD and to assess its merits as a mechanism for disaster recovery. It is organized around two core research questions: (1) how did RBD perform as an instrument of disaster recovery in New York? and (2) what are the tradeoffs between RBD’s recovery-through-competition model and other modes of disaster recovery?
To respond to these questions, I employed a two-phase qualitative research design. First, I conducted twenty-six semi-structured interviews with key informants from the RBD competition. This includes leaders from each of the ten design teams engaged in the competition, leaders from the governmental and philanthropic institutions administering the competition, and leaders from the primary neighborhood groups affiliated with the competition.

Second, I performed a content analysis of ten design proposals and plans submitted for review by RBD’s national jury. These proposals were assessed for their adherence to the competition’s goals, their relative feasibility, and their potential impact. The findings from this evaluation include urban design-related recommendations for the deployment of soft, coastal infrastructure and urban policy-focused recommendations for the deployment of future competition-based recovery efforts.

References

Abstract Index #: 122
A COMPARATIVE ASSESSMENT OF THE SECTION 319 PLANNING PROCESS IN SOUTH CAROLINA
Abstract System ID#: 891
Individual Paper

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Although land use choices and land cover are dominant contributors to U.S. water pollution through the diffuse nonpoint sources (NPS) that they generate, previous work (White forthcoming; Conroy forthcoming; Dyckman forthcoming) suggests that planners have not been substantially involved in the federal Clean Water Act’s Section 319 planning process in pilot study states of Kansas, Ohio, and South Carolina. Like hazard mitigation planning, planning practitioners appear to have been ancillary or separated from an integral planning process that is immediately affected by concurrent yet parallel land use decisions in the comprehensive plans for the watershed’s primary city or county. Other scholars have shown that NPS watershed planning is predominately conducted by collaborative, place-based watershed groups that vary considerably in their composition, formalization, and water quality typology, resulting in questionable pollutant removal and watershed plan implementation efficacy (Hoornbeek et al. 2013; Hardy and Koontz 2008). These findings affirm those of planning scholars, who have shown that the absence of the planner has the potential to influence plan quality and its implementation in hazard mitigation (Lyles et al. 2014; Burby et al. 1998). But no one has studied why planners have been active in or absent from these horizontally related but essential planning processes (particularly watershed based planning) that bolster standard comprehensive plans.

This work seeks to do so in South Carolina, as part of a larger, comparative study of Kansas, Ohio, and South Carolina to address the traditional planning and watershed-based planning under Section 319. Like the other chosen pilot states, South Carolina is predominantly rural. However, it is experiencing urbanization in the top of the state’s watersheds, and its primary NPS contaminant is fecal coliform.
Building on a previous survey of planning practitioners in the state, the methodology consists of two sets of interview subjects and two separate interview instruments. The first includes expert interviews with the state’s Section 319 grant coordinators (n = 1 – 3, depending on institutional history over the lifetime of the Section 319 program) to garner the state coordinator’s perspective on the watershed based planning process and resulting plan product, as well as his/her expert advice in recommending watersheds for case studies. The second set of interviews involve participants in the recommended watersheds, narrowed to two case study watersheds which are physically similar (in size, urbanization/rural ratio, pollutants, etc.) but contrasting in the presence of a planner in the watershed-based planning process (whether in their official capacity or otherwise). The interviewees (n = 10 – 15) in each case study watershed include: (1) planners who participated (if present), (2) other participants listed in the watershed-based plans, (3) participants not listed but noted by the Section 319 grants coordinator or other listed participants, ascertained through a snowball sampling approach.

The results will be analyzed using content analysis, and are expected to reveal the impetus for the presence or absence of the planners in the Section 319 watershed planning process in South Carolina, in order to (1) further elucidate the extent of and motivation for the planner’s participation in both the Section 319 grants and the watershed planning process that follows from the grants more generally; (2) provide a basis for watershed-based plan quality assessment; (3) be an eventual input in the plan implementation assessment for watershed-based plans in the pilot states noted above; and (4) contribute to the broader motivations for planner involvement in horizontal but ancillary forms of planning.

References

Abstract Index #: 123
PROMISING PRACTICES IN LOCAL PLANNING FOR CHEMICAL HAZARDS
Abstract System ID#: 907
Individual Paper

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In 2013 national attention became refocused on local planning for chemical hazards due to the industrial fertilizer plant disaster in West, Texas. Local emergency planning committees (LEPCs) are key local organizations with federally-designated responsibility for emergency planning and ensuring community right-to-know about chemical hazards at fixed facilities and in the transportation system (Gablehouse, 2005; Lindell & Whitney, 1995). Most LEPCs operate primarily on volunteer effort with extremely limited available funding (Gablehouse, 2005; Bierling, et al, 2011). Thus, while a variety of local emergency planning activities are potentially available (McEntire & Myers, 2005), those activities that LEPCs undertake must be practical and achievable. This research examines the factors that contribute to success of local communities’ planning for hazardous chemicals transport emergencies. During Summer 2015, the authors are conducting focus groups with three to five LEPCs in Texas to identify lessons-learned and promising practices utilized. The focus groups will cover the planning projects these organizations have conducted and the factors (Lindell & Whitney, 1995; Rogers & Sorensen, 1991) that contributed to the project outcomes. Organizational, individual, and process characteristics for different project
types will be presented, along with recommendations for maximizing return on effort given organizational constraints such as resource limitations.

References

Abstract Index #: 124
THE ENVIRONMENTAL AND ECONOMIC IMPACTS OF MOORAGE MARINAS ON THE WEST COAST
Abstract System ID#: 910
Individual Paper

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Marinas have been seriously under-researched in planning: “We have virtually ignored oceans and marine environments in modern planning, policy, and design of cities” (Beatley 2014, p. xi). This is in spite of the fact that the development of marinas is expanding nationwide. There is lack of research on how mooring facilities harm the marine environment and shoreline health as a result of oil spills, toxic painting of boats and docking facilities, soap, sewage and waste discharges, and other environmental consequences and the extent to which these are offset by regional economic benefits. In this paper we focus on two locations: Washington State and Marina Del Rey, California. Both are illustrative of how to resolve the trade-off between environmental and economic impacts, but in different ways. Washington probably has the most rigid environmental regulations in the country (although the Habitat Conservation Plan proposed by the Department of Natural Resources was held up) and the costliest tax laws on marina boat owners. Marina Del Rey, California is the largest man-made marina in the world (with 5,300 boat slips), and is trying to balance the costs of a massive dredging program with the economic and social benefits that result one of the most valuable community assets in Los Angeles County. We combine two models to analyze the two different aspects (i.e., economic and environmental) of these questions to meet the project goals. First, for the positive economic impact analysis, we will use state-level input-output (IO) models, based on data and software from MIG (formerly the Minnesota IMPLAN Group) Inc.’s IMPLAN (Impact analysis for Planning) (Gordon et al., 2007; Park et al., 2013, 2011). The result is a regional economic analysis system that can combine all counties and states into a single study area, yielding a complete set of regional social accounts. The USDA (US Department of Agriculture) Forest Service developed IMPLAN in the mid-1970s for community impact analysis, and, at present, over 1,500 clients across the U.S. use the IMPLAN model. The current IMPLAN model and input-output database remains an agency standard for the USDA’s Natural Resources Conservation Service (NRCS). Second, to measure the negative impacts, a quasi-experimental methodology will be used to quantify the environmental burdens (Shadish et al., 2002; Park et al., 2009). For the negative environmental costs, we will survey the costs of mediation eco-friendly measures for the clean marinas, and moorage fees for
boat owners. Combined, the net values of the economic gains and environmental externalities can be used in the Southern California and Washington to explore more effective coastal development strategies for recreational vessel moorings. The research makes use of extensive economic and environmental data collection from marina facilities in the West Coast Communities. Public funding to reduce environmental damages and extracting payments from boat owners is too limited. Cities and neighborhoods close to marinas receive significant tax revenues from the indirect and induced spending (measured by the application of a highly spatially disaggregated multiregional input-output model) and marinas may offer recreational benefits to regional residents. Surrounding local governments may be persuaded to contribute to the provision of resources that can mitigate environmental damages. The overall policy goal is to find ways of reducing the environmental costs with minimal damage to the substantial economic and social benefits.

References

EXAMINING DETERMINANTS OF RESIDENTIAL ENERGY CONSUMPTION IN THE U.S: A PANEL APPROACH
Abstract: Given growing concern about global warming and natural resource depletion, energy issues have been placed high on the agenda of planning research. In particular, recent years have witnessed an increasing number of studies in the planning discipline devoted to understanding the nature of residential energy consumption, which accounts for approximately one fifth of total energy use and is expected to increase over the next few decades, as well as that in transportation sectors (see e.g., see Newman and Kenworthy 1989, Ewing and Rong 2008, Steemers and Yun 2009). Existing research on residential energy use has highlighted the significance of both human and environmental factors and provided a clue to identifying effective strategies for potential energy saving, but our knowledge base about residential energy consumption dynamics still remains limited. This study empirically investigates what determines individual households’ residential energy consumption in the U.S. While previous research has typically been conducted at an aggregated geographical scale or with the use of a cross-sectional dataset (Swan and Ugursal 2009), the present study employs a panel approach which has advantages in controlling for unobserved factors and capturing the dynamics of energy consumption. More specifically, it presents a “housing” panel analysis in which repeated observations of the same set of housing units between 2001 and 2011 (provided by the American Housing Survey biannually) are utilized to reveal key determinants of residential energy use and their varying effects.

The panel analysis shows that residential energy use is largely determined not only by energy price but also by household composition, their life styles, duration of residence, and detailed housing unit characteristics. Household income is also found to have significant impacts on the amount of energy consumption. The income effects, however, exhibit quite distinct patterns in different groups of households, suggesting that the way income and other household characteristics shape the level of energy consumption is complicated.
References


Abstract Index #: 126
Fired Up: Vulnerability, Resilience, Equity, and Federal Wildland Firefighter Safety Policy in Perspective
Abstract System ID#: 935
Poster

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A century of fire suppression policies, suburban development in wildland-urban interface areas, and changes in temperature and precipitation patterns due to climate change are leading to more intense fire seasons. As a result, the once little known profession of wildland firefighting has been thrust into the public eye. Despite the substantial influence Federal fire managers have over land use decisions, less is being done to address systemic safety issues that exist within Federal fire safety policies, affecting firefighters who are carrying out land management activities on the ground level. Major concerns include the absence of medics on Federal wildland fire crews and a lack of training to provide supervisors with the knowledge required to identify serious medical emergencies. In effect, this group of public employees is being marginalized due to Federal land management safety policy, presenting a major equity concern.

Though Federal fire safety policy has evolved substantially over the last two decades in response to several tragedy fires, many of these actions only address incremental rather than systemic problems. Specifically, new protocols emphasize individual resilience of firefighters during medical emergencies, rather than addressing the larger institutional problems within Federal land management safety policy that make firefighters vulnerable. This project conducts a detailed policy analysis to identify barriers to the implementation of a medic position on fire crews, such as multi-scalar jurisdictional concerns and mismatched safety policies among and within Federal land management agencies. Methodological techniques include quantitative analysis to compare local fire district budgets for the provision of safety equipment and resources among Federal land management agencies, as well as qualitative interviews with firefighters and policy makers from Federal land management agencies.

This research will have implications for how Federal fire policy can be modified to increase the safety of the firefighters who fill a critical role in land management of areas under intense development pressure in the western United States. Allowing firefighters to continue carrying out important land management activities without the necessary safety resources presents a major equity issue that could be addressed through more comprehensive Federal land management safety policy.

References

Abstract Index #: 127

SPATIAL EXPRESSION OF BIOLOGICAL CONSERVATION EASEMENTS IN FINE SCALE, SMALLER LAND TRUST CONSERVATION

Abstract System ID#: 970
Individual Paper

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As part of a larger project related to the shifting dynamics between conservation easement (CE) holders, CE donors/sellers, regional land use pressures, and connections to other conserved lands, this research examines the spatial expression and ecological integrity of CEs in different regions of the United States. We are doing so at the fine scale, linking the national and regional policy structures with the parcel-level detail in order to determine whether CEs with an enumerated biological purpose are more closely aligned and promote habitat connectivity with other biologically conserved lands than CEs with other expressed purposes.

This research contributes to the body of literature on systematic conservation planning, which requires a systematic process that accounts for ecosystem attributes, targets levels for particularly vulnerable and/or irreplaceable populations, and generates connectivity standards (Margules & Pressey, 2000). A few nongovernmental entities holding CEs have adopted a systematic conservation process for targeting private lands—typically the most biologically valuable, but most efforts remain uncoordinated and ecologically ad hoc, particularly with smaller land trusts.

Increasingly, conservation biologists are concerned about this problem, and are building a literature related to CE propagation and private land conservation more generally (Rissman et al., 2007; Merenlender et al., 2004). Development pressure and/or the other legally qualified uses for a CE may compromise the ecological integrity of that private land. In fact, there is a concern that the broad federal qualifications for CEs may encourage piecemeal preservation of land with little ecological value (Coombes, 2003; Boyd et al., 2000). While there is latent public benefit value in land being conserved, its ecological quality may be questionable (Rissman et al., 2007) and the CE may allow more development than would otherwise occur on publicly managed land, or it may be surrounded by leapfrog development, causing habitat fragmentation and isolation (Richardson & Bernard, 2011; Rissman et al., 2007; Coombes, 2003). Arguably, preservation is better than no preservation, but CEs may also increase land costs by removing developable land, potentially displacing growth into socially and environmentally questionable locations. With increased land costs, it may preclude outright fee simple purchase of ecologically valuable lands.

To test the spatial expression of the biological CEs and their relationship with conserved lands versus those of CEs with other purposes and their relationship with the same, the researchers collected parcel level assessment data from 1997 through 2008 and generated a corresponding ArcGIS database with individual conservation easement data from four counties in two pilot states (Sacramento and Sonoma Counties in California, and Boulder and Mesa Counties in Colorado). Using spatial statistics, the researchers assessed distance from the ecological CEs to the conserved lands and tested for autocorrelation using Moran’s I, as well as conducted the same for the CEs with other purposes and their relationship to the conserved lands within each county. The results will determine whether CEs with enumerated biological reasons in these counties are more highly correlated with other conserved land and offer more biologically valuable habitat than CEs with non-biological purposes. They will also determine whether basic conservation biology principles are being maintained on CEs with less systematic conservation planning by smaller land trusts with a more opportunistic land conservation strategy. Finally, it will
reveal whether systematic planning is correlated with the kind of entity holding a CE, filling a needed gap in the conservation planning literature.

References


Abstract Index #: 128
FUELING SKEPTICISM: A CRITIQUE OF A ”SUSTAINABLE” CITIES’ ELECTRICITY GENERATION STRATEGIES

In February 2015 the London-based Center for Economics and Business Research (CEBR) published its first – and the world’s most recent – ranking of the world’s most sustainable cities. This particular rating scheme ranked nations based on indicators in the categories of social (“people”), environmental (“planet”), and economic (“profit”)—roughly equivalent to the three “E’s” (“equity”, “environment”, and “economy”) that have also been used in the sustainability lexicon. In the “planet” category, cities were ranked based on indicators for energy consumed per capita, renewable energy share of energy use, recycling rates, greenhouse gas emissions, natural catastrophe risk, drinking water sanitation, and air pollution. Consistent with sustainably rankings by other organizations, European cities earned the top six scores and ten of the top 12 scores in this category.

Systems for ranking the environmental sustainability of cities often use indicators for the proportion of a city’s energy that is supplied by non-fossil fuel energy sources, such as solar, wind, hydropower, geothermal and the burning of biomass. In fact, several of the highly-ranked European nations are relying increasingly on the burning of biomass and, in some cases, of garbage, for their electricity generation. Proponents of biomass-to-energy or heat argue that when biomass (such as trees) is burned, the CO2 that is released from the burning is cancelled out by the CO2 that is captured by the trees planted to replace those used for fuel. This is the logic used by the Global Footprint Network when it calculates ecological footprints of the world’s nations (M. Wackernagel et al., 2014). However, Walker et al. (2013) argue that that several factors determine whether wood burning can approach being a carbon neutral form of heat and electricity generation, and that in certain scenario using biomass can actually produce more CO2 than the burning of fossil fuel. Research by Haugen (2013) draws a similar conclusion.

Proponents of utilizing garbage to generate electricity argue that using the most recent technology such as that deployed in some European cities, not only produces little pollution but saves landfill space (Themilis and Massehe, 2014). Other researchers, such as Chandel et al. (2012) maintain that the most advanced garbage-to-fuel technologies generate greenhouse gases and remove incentives for minimizing throughput.

This paper examines the degree to which the world cities ranked in the top 20 for the “planet” category of the 2014 CEBR study either do -- or intend to -- increasingly rely on, the burning of biomass and/or of garbage for generating electricity, for which they get credit for utilizing “renewable” energy sources. The paper then summarizes the current debates, and draws conclusions, on whether and the degree to which the burning of biomass, and of garbage, should be encouraged as renewable and ecologically-friendly energy sources. The
paper concludes with ideas on the roles that planners can play in helping the discussion and resolution of the controversies over these two strategies for “sustainable” electricity generation.

References

Abstract Index #: 129
SHARING CITIES: A CASE FOR TRULY SMART, JUST AND SUSTAINABLE CITIES
Abstract System ID#: 989
Pre-organized Session: Justice, Sustainability & the City: Possible Paths

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The future of humanity is urban, and the nature of urban space enables, and necessitates, sharing--of resources, goods and services, experiences. Yet traditional forms of sharing have been undermined in modern cities by social fragmentation and commercialization of the public realm. In Sharing Cities I argue that the intersection of cities’ highly networked physical space with new digital technologies and new mediated forms of sharing offers cities the opportunity to connect smart technology to justice, solidarity, and sustainability.

In effect I propose a new “sharing paradigm,” which goes beyond the faddish “sharing economy”--seen in such ventures as Uber and TaskRabbit--to envision models of sharing that are not always commercial but also communal, encouraging trust and collaboration. Detailed case studies of San Francisco, Seoul, Copenhagen, Medellin, Amsterdam, and Bengaluru (formerly Bangalore) contextualize the authors’ discussions of collaborative consumption and production; the shared public realm, both physical and virtual; the design of sharing to enhance equity and justice; and the prospects for scaling up the sharing paradigm though city governance. I show how sharing could shift values and norms, enable civic engagement and political activism, and rebuild a shared urban commons. Their case for sharing and solidarity offers a powerful alternative for urban futures to conventional “race-to-the-bottom” narratives of competition, enclosure, and division.

References
This paper examines if and how water utilities are undergoing organizational change to incorporate distributive justice in wastewater capital improvement plans. Utilities’ planning decisions are conventionally made through the application of a market logic that has adversely impacted low-income communities and people of color. Environmental justice scholarship has shown that the lack of service provision, the siting of large treatment plants, and combined sewer overflows are among the wastewater planning concerns that burden low-income communities of color. In a classic case study, Spirn (2005) chronicles the challenges faced by the residents of Philadelphia’s Mill Creek neighborhood, where homes and a sewer were built on a floodplain, creating health and safety hazards for its residents. Yet water utilities in the United States are by and large public institutions, and some are responding to the environmental injustices that they create or compound. This is plausible, since organizations rarely reify a single logic; multiple logics can co-exist, even if they conflict (Thornton and Ocasio 2009). This paper thus asks, How are utilities undergoing organizational change to incorporate environmental justice? What are the implications of these changes for the realization of distributive justice?

I answer these questions through a case study of environmental justice efforts, and associated organizational change, in San Francisco’s most recent wastewater capital improvement program. As the utility undertakes this twenty-year, $7 billion endeavor, it is also working to incorporate new environmental justice policy. The paper draws on several conceptual and theoretical frameworks. Literature on ‘institutional logics’ guides the comparison of market and environmental justice logics in water utilities. Organizational changes that have occurred as a result of the uptake of a logic of environmental justice are identified using Scott’s (2014) framework on institutional pillars and carriers. The implications of these organizational changes for distributive justice are identified using Schweitzer and Valenzuela’s (2004) classification of claims of environmental injustice. Findings provide insight on the constraints and possibilities of reifying distributive justice in wastewater planning through organizational change.

References
Despite heavy investment in phosphorous abatement program in the 1980s in response to mandates established with the Grate Lakes Water Quality Agreement, eutrophication has re-emerged as a significant concern in shallower, nearshore regions of the Great Lakes. This problem highlights the complexities of Great Lakes ecosystems as they respond not only to natural stress, but also to human management. Main stresses on the nearshore region include the invasion of dreissenid mussels and the creation of a biological filter shunting phosphorus to the coastal zone, hydrodynamic controls on cross-margin material fluxes, and land use changes, with associated changes in watershed inputs. Climate change underlies each of these processes, affecting the thermal regime of the lake, and altering water supply and associated habitat.

The nearshore problem has significant economic consequences, including temporary shutdowns of power plants. For example, the Fitzpatrick nuclear power plant near Oswego, New York was closed for several days in the fall of 2007 due to algae clogging of intake cooling water filters, at a cost of $1 million per day. Other impacts include beach closings, declining recreation and land values due to excessive growth of nearshore nuisance algae (e.g., Cladophora), increased occurrence of harmful algal blooms and associated toxin production, shifts in fish community production and species dominance that affect sport fisheries, and increased costs associated with drinking water treatment.

Whereas eutrophication science is relatively well-established, less is known about the Great Lakes human subsystem that impacts and interacts with the environment subsystem. Scholarship tends to focus on the configuration and capacity of domestic institutional arrangements or the connection between uncertainty and decision-making to explain progress on the Great Lakes, however, much remains to be explored with respect to the interaction between policy, economy, education, and science—the crux of sustainability—within the context of the Great Lakes coastal ecosystem.

In this paper, we examined human subsystems, particularly focusing on the Genesee River watershed within the Lake Ontario nearshore ecosystem. A network survey was distributed to decision-makers, resource managers, scientists, and stakeholders, who are particularly working for water quality issue of the study area. The main goal of this study is to identify information and knowledge transfer mechanisms and pathways underlying the decision-making process of water quality management specific to the study area using Social Network Analysis. For example, we can identify knowledge brokers, who have high betweenness centrality scores, to disseminate innovative water quality management knowledge and measures effectively. In addition, we can diagnose the sustainability of human subsystems with network parameters such as network density and cohesiveness.

References

Land conservation is a primary tool for protecting natural resources and setting aside open space. For example, the National Wildlife Refuge System provides an estimated $27 billion per year of ecosystem services such as habitat, waste assimilation and water filtration (Ingraham and Foster 2008). During recent years, some studies have suggested that land conservation, by providing a residential amenity, may inadvertently attract leapfrog development (Wu and Plantinga 2003; Irwin and Bockstael 2004). Such development could undercut the objectives of land conservation by fragmenting surrounding habitat and fostering urban growth. Other studies have suggested that public reserves could attract private conservation, thereby reinforcing their impact on natural resources (Albers, Ando and Chen 2008). This study uses a sample of national wildlife refuges to assess the impact of protected areas on municipal land use. Following the Propensity Score Matching method used by Andam et al. (2008), tracts inside of protected areas are matched with similar control tracts located outside of the protected areas. Tracts are matched based on conditions in 1991 using the National Land Cover Database (NLCD). Based on theory in urban spatial structure and conservation reserve design, tracts are matched both on habitat characteristics (such as land cover) and development potential (such as travel distance to regional centers). The land use for protected and control tracts are compared 20 years later using the 2010 NLCD. This study provides quasi-experimental estimates of the impact of one of the major federal land protection programs over multiple decades both in terms of the amount of development attracted by protected areas and the amount of development prevented by them. The results can be used to inform efforts to manage protected areas and to plan for municipal growth while reducing unintended consequences.

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synergistic green infrastructure systems, and opportunity for scaling-down of the municipal climate adaptation planning process.

References


Abstract Index #: 134

HOUSING MARKET RESPONSE TO AMENITIES AND HAZARD: THE CASE OF LANDSLIDE EVENT IN WOOMYEON NATURAL PARK, KOREA

Abstract System ID#: 1044

Individual Paper

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Natural parks, such as beaches, rivers and mountains, provide amenities for the public, but residents near natural parks could be more vulnerable to natural disasters like floods, tsunamis and landslides (Bin et al., 2008, Smith, 2013; Highfield et al., 2014). Many of natural parks in urban areas in South Korea consist of mountains and forests, and they are the places of local residents for their leisure and recreation activities such as climbing, hiking and walking. Further, as natural parks furnish fresh air and a fine view, households are likely to live close to a natural park to enjoy the amenities with paying premium on housing value. However, mountains themselves have a hazard of landslide when the slopes of the mountains are poorly managed and the ground has weakened due to a heavy rain (Hewitt, 2014). Thus, the risk of landslide could be negatively capitalized into the property values.

A growing body of research has applied hedonic price models to identify factors affect property values, but less is known regarding the effect of hazards of natural disasters on property values in the context of landslide. Also, the trade-off between amenities and hazard effect of mountains on property values is not addressed well. Therefore, this study aims to analyze the effects of mountains as both amenity and hazard factors on property values before and after a landslide event. Specifically, three research questions are addressed.

1. What is the effect of amenity and hazard of mountains on nearby home values?
2. Is the negative effect of the hazard strengthened after a catastrophic landslide event?
3. Does the negative effect of the hazard continue in the long-term after the restoration of the landslide?

In order to answer these questions, this study analyzes the housing market near Woomyeon Natural Park in Seoul from 2008 to 2014 using a hedonic price model. A landslide of Woomyeon mountain in July 2011 derived from a heavy rain resulted in property damage with more than 16 billion won, 18 deaths and 21 injuries, which was one of the largest natural disasters in Seoul since 2000 (Seoul Metropolitan Government, 2014). To account for the effect of the landslide event, this study analyzes three regression models: (1) before the landslide period (January 2008 – July 2011), (2) after the landslide period-short term effect (August 2011-July2012), and (3) after the restoration of the landslide period-long term effect (August 2012-July2014). Further, a difference-in-difference approach is applied to examine the effect of amenities and hazard on property values over the entire period. Housing sale data from the Korea Ministry of Land, Infrastructure and Transport, and other property and locational characteristics are utilized to construct the hedonic price model.
This study will provide the systematic analysis of the role of natural parks in housing markets as amenities and a hazard, thus filling the knowledge gaps in disaster management planning and housing studies. Further, understanding the trade-off between amenities and hazard in property values will help governments and planners develop safe and pleasant communities.

References

Abstract Index #: 135

PLANNER AND PUBLIC OFFICIAL PERSPECTIVES ON ENVIRONMENTALLY SUSTAINABLE RESIDENTIAL DEVELOPMENT
Abstract System ID#: 1060
Individual Paper

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Throughout the United States, local land use decisions are made primarily by public officials (i.e., plan commissioners), who often lack training, expertise, and professional experience in land use planning. Plan commissioners’ decisions significantly impact the character of their communities for decades to come. While they may value environmental sustainability, plan commissioners often approve residential developments that negatively impact the natural environment more so than alternative designs might. Local planning staff, who provide recommendations to the plan commissions, have great opportunities to influence decisions and the implementation of environmentally sustainable residential development practices. Yet, empirical work examining both planner and plan commissioner perspectives on environmentally sustainable residential development does not exist, even though the perspectives of planners or plan commissioners on different residential development patterns and on environmental impacts of residential development have been studied by several scholars (Bowman et al., 2012; Crick and Prokopy, 2009; Kaplan et al., 2008; Ryan, 2006). This paper aims to help fill that gap in the literature.

I present findings from a study conducted in Waukesha County, located in southeastern Wisconsin. In 2013, we interviewed 27 municipal and county planning staff and 31 plan commissioners on their perspectives and practices concerning alternative forms of residential development to conventional low-density, large lot, land use-separated, and automobile-dependent residential developments. We also asked these professionals about their concern for the environment and the importance of environmental sustainability for themselves.

The preliminary findings suggest that in general planners and plan commissioners have limited understanding of how various site features in a residential development and how alternative development patterns impact the natural environment. They also have limited knowledge of strategies that would promote environmentally sensitive and sustainable residential development: around a quarter of the planners and plan commissioners interviewed could not provide any strategy apart from provision of open space in a particular development. The study finds that the most common residential development type implemented as an alternative to low-density, automobile-dependent conventional development is conservation subdivision design, which clusters residences in smaller lots in order to protect subdivision land in shared open spaces. Yet, the communities differ significantly in their implementation of the design, and the planners and the plan commissioners differ in their understanding and assessment of the potential benefits of the design. According to the study, when compared
to plan commissioners, planners are better able to articulate residential development that would be more environmentally sensitive and sustainable. Moreover, staff with formal planning training appear to value independency from the automobile more so than others in promoting environmentally sustainable residential development.

References


Abstract Index #: 136
PUBLIC RISK PERCEPTION AND CLIMATE CHANGE: FACTORS AFFECTING RESIDENT PERCEPTIONS AND ATTITUDES TOWARDS SEA LEVEL RISE
Abstract System ID#: 1072
Individual Paper

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Public risk perception is one of the key components of the policy making process. It has the capabilities to support or constrain adaptation actions to address any particular risks. Perceptions of the risks of sea level rise greatly influence public opinion on sea level rise adaptation policies. Some studies revealed that public risks are influenced not only by scientific and technical descriptions of risk, but also other social factors including personal experience, affect and emotion, trust, and values (Slovic, 2000; Dessai et al., 2004). This study addresses the question of how local residents respond to potential inundation due to sea level rise, investigating the main factors affecting their behaviors and attitudes.

To achieve this goal, a scenario-involved survey method identifies several crucial findings related to residents’ attitudes towards future inundation. Data has been collected through a state preference survey for coastal households in Panama City, Florida. The analysis then included the following: descriptive statistics on adaptation behavior, cross tabulation to examine how responses to survey questions related to attitudinal and demographic characteristics, and multiple regression analysis to determine which factors affecting the residents’ responses.

Based on the initial research findings, the majority of respondents (60%) believes that sea level rise exists. However, a vast number of respondents would be unwilling to relocate even if their primary residence is likely to be permanently inundated due to rising sea level. Respondents’ decisions to relocate are significantly associated with factors like age, household income, race, and attitudes towards natural hazards. These findings may help coastal communities shape their policies, raise public awareness about sea level rise, and develop adaptive strategies and other resilient plans.

References


**Abstract Index #: 137**

**USING ECONOMETRIC MODELS TO IDENTIFY THE TIPPING POINTS OF DIFFERENT SEA LEVEL RISE ADAPTATION STRATEGIES**

Abstract System ID#: 1078

Poster

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Sea level is expected to rise steadily though slowly in the foreseeable future. A direct consequence of sea level rise is the inundation and flooding, inflicting considerable economic and ecological damages. A challenge for all coastal area governments and state and national politicians is to decide on an appropriate adaptation strategy to mitigate the damages and when to implement it, and more importantly on how to rally public support for the new adaptation strategy.

The key concept in this study is the tipping point defined as the delay time when a new adaptation strategy is just as effective as the current adaptation strategy. The effectiveness of a new adaptation is measured by the net benefit defined as the difference between the damages mitigated by the new adaptation and the damages mitigated by the current adaptation minus the implementation cost of the new adaptation. Quantitative methods will be used to analyze and measure economic, social, and ecological impacts of sea level rise scenarios. Assessment includes impact analysis, scenario design, and benefit-cost analysis. Economic values to evaluate benefits and costs will be drawn from the literature.

The findings will be applied to compare and identify optimal (or “second-best” – given existing market distortions) adaptation strategies based on a comprehensive economic analysis, with input from secondary data sources - publicly available data and previous research findings. The tipping point can be used as an effective decision making method to educate the public on a complicated policy matter.

**References**


**Abstract Index #: 138**

**SOCIO-ECOLOGICAL SYSTEMS: CROSSING DISCIPLINARY BOUNDARIES IN ENVIRONMENTAL PLANNING WITH CASES FROM CORAL REEF COMMUNITIES IN INDONESIA AND MALAYSIA**

Abstract System ID#: 1080

Individual Paper

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Environmental planners and policy-makers and the communities they serve face challenges in managing shared or “common pool” resources. Coastal resources present a management dilemma, since they are often over-exploited, yet it is nearly impossible to exclude people from their use. In heavily urbanized coastal areas, experts are increasingly operationalizing natural resource management problems as “socio-ecological systems” (Ostrom
This theoretical tool views coastal environments as linked to the local social systems (culture, values, attitudes, beliefs) and economic systems (markets, eco tourism). Any management question must examine all three systems and their interconnectedness (Berkes 2004). It is estimated that 120 million Southeast Asians depend directly on reefs for livelihoods. Because of increased awareness of the enormous value of coral reef ecosystems, regional governments are trying to improve the way that communities plan and manage their reefs by creating and fostering stronger reef management institutions, defined as the rules and organizations that determine resource use (Cinner et al. 2009). Institutions require specific and unique building blocks (Agraval and Gibson 1999). This research draws on theory to specify these building blocks as they pertain to coral reef communities. It then links institutional traits with ecological system health.

Co-management institutional frameworks, where power is shared between the local resource users and national government, allow resource users to take primary responsibility for day-to-day management and is hypothesized to enhance ecological health. My research compares 6 cases of co-managed reefs, 3 Indonesian villages and 3 Malaysian villages, in order to determine what institutional frameworks tend to result in healthy reefs. These villages are all recovering from decades of blast fishing, where dynamite was a common route to catching fish. I measure 7 specific components of institutions using qualitative interviews and quantitative surveys. I measure ecosystem health with established biophysical ecological survey methods on the village reefs.

I find that participatory institutions do not necessarily lead to healthier reefs, a surprising finding. I find that deliberate slow growth, often imposed from the top down by respected local elites is one of the strongest predictors of healthy reefs. I find that in some cases, social systems are resilient (able to withstand shocks) and display evidence of participatory risk management (such as insurance schemes) but ecological systems are not always equally resilient. Overall this means that design for reef management needs to take into account the history of a socio-ecological system, the culture and values of the local people, as well as the unique ecological drivers of change. One size fits all management schemes, even well intentioned ones that stipulate participatory processes and equity, are to be viewed with caution.

References

**EQUITY AND ADAPTATION PLANNING: DO WE KNOW WHAT WE MEAN?**

Although initially lagging behind policy for greenhouse gas emission reduction, policy for climate change adaptation is becoming more common in our planning documents (Bierbaum, 2013, Wheeler, 2009). The standard narrative of climate change adaptation focuses on human resiliency in the face of increased weather events, variations in temperature and precipitation, and the impacts of sea level rise. However, climate change events will not affect all populations equally, and there are different narratives of “resiliency,” “vulnerability” and “justice” that planners must consider as they begin implementing climate adaptation policies (Bulkeley, 2013).
This research will utilize tools and theories from the fields of both urban planning and geography to analyze how equity is addressed in US municipal climate adaptation plans.

This poster explores the role that vulnerability and equity considerations play in the municipal planning process, analyzing how these terms manifest themselves in climate adaptation plans from 11 cities in the United States. It inquires: How are equity and justice defined, and what (or who) is missing from these definitions? Why do certain communities consider vulnerability and equity more than others?

This research employs a mixed-method approach combining both quantitative analysis of data derived from plan-coding analysis and a qualitative assessment of specific case-study cities. The quantitative analysis follows the established guidelines of plan quality literature and content analysis to study municipal climate change adaptation plans in the United States (Lyles and Stevens, 2014). This method replicates items used in local hazard mitigation plan quality research combined with specific language focused on social equity, environmental justice and vulnerable populations. The qualitative analysis uses interviews and case studies to further analyze the creation and implementation of equity-related aspects of the plans, and shed light on how planners contextualize and prioritize equity considerations. This analysis will further utilize a constructivist approach, questioning both the power dynamics and social implications of our current climate adaptation planning methods.

Our findings indicate that the current iterations of equity in our climate adaptation plans do not adequately address the true extent of vulnerability to climate change impacts that some communities will feel. Within our research, it is evident that the treatment of equity included in these climate adaptation plans is minimal and vague. These findings have implications for policy, offering planners the potential to find more equitable means of adapting to climate change.

References

Abstract Index #: 140
URBAN DENSITY AND WATER CONSUMPTION
Abstract System ID#: 1110
Individual Paper

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Water availability is an increasingly important factor in planning, especially in the Western United States. This dissertation examines how the built environment, specifically land use density at the county level for urban counties, impacts water consumption per capita. As cities increase land use density, water consumption per capita should decrease. Controlling for climate, water pricing, state water polices and sociodemographic variables, water consumption per capita will be higher in sprawling urban counties than in higher density compact urban counties.

Increases in sprawl among highly concentrated and growing populations can easily outstrip local water resources. Larger single family homes with large lot sizes increase water demand, further exhausting the resource. Sprawling development increases the geographical area served by public water systems. Distributing water resources across
vast distances increases inefficiencies in these systems. For example, in the United States an estimated one trillion gallons of water are lost each year to broken pipes and infrastructure damage (U.S. EPA, 2011).

This is a longitudinal study using fixed effects regression to measure changes in water consumption per capita associated with changes in land use density between the years of 1995 and 2010. US Geological Survey data for domestic consumptive use between the years of 1995 and 2010 has been compiled to use in conjunction with Reid Ewing et al Sprawl Index to examine the impact the built environment has had on water consumption per capita over a fifteen year period. It has been suggested that increases in density decreases water consumption per capita, this study intends to validate this hypothesis through data and statistical analysis. Results from this study will help to inform the benefits of density over sprawl when planning in areas of water scarcity.

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Abstract Index #: 141

PLANNING FOR A NEW URBAN ENVIRONMENTAL HISTORY OF MEGAREGIONS
Abstract System ID#: 1118
Individual Paper

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The intensification of the interplay between space and place within and across regions has been described as a process that leads to urbanizing megaregions throughout the world. Recognized in countries with and without classical industrial histories on all of the inhabited continents, urbanizing megaregions are characterized by a multi-nodal mosaic of developed and undeveloped land that dissolves traditional boundaries between cities, regions, suburbs, and rural areas. As a result, these conurbations containing between 40 and 120 million people raise pressing governance challenges, not the least of which are concerned with managing environmental impacts (Harrison and Hoyler 2014).

Studies of the environmental impacts of urbanizing megaregions thus far have generally forwarded the assumption that the shift toward megaregional economies and infrastructure has an environmental benefit (see RPA 2007; Ross 2009). This assumption results from the focus within the planning and policy literature on “clean advanced service” industrial growth and the development of large scale transit systems, usually in the form of high-speed rail. Wheeler (2015) specifically challenged this approach by identifying five reasons why our understanding of environmental impacts from megaregional urbanization cannot fall into the easy narrative of a “clean industry” shift associated with the new global economy of advanced service growth.

Building on the effort to better understand the environmental planning challenges of urbanizing megaregions, I argue for the need to view the environmental impacts as qualitatively different than those that shaped the environmental history of regions that grew out the industrial era expansion of cities. The environmental impacts of urbanizing megaregions are far more systemic. I use a quantitative spatial analysis of commuting, energy use and spatial segregation to measure these systemic effects of urbanizing megaregions in the United States and specifically describe the potential impacts on processes of biogeochemistry. I draw on these findings to describe
the challenges that the new environmental history of megaregions (which is taking shape now) will present for the existing practice or urban environmental planning.

References


Abstract Index #: 142

A STUDY ON THE ENVIRONMENTAL IMPACT OF LIFTING GREENBELTS: KOREAN CASE

Abstract System ID#: 1121

Poster

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Principles of the sustainable city were introduced to the basis of modern planning in the late 20th century to solve environmental problems of rapid industrialization and urbanization. These new principles brought a change of modern planning paradigm such as smart growth, compact city and new urbanism.

South Korea introduced the greenbelt policy in the 1970s to prevent urban sprawl and protect environment through conservation of suburban green areas. The policy of greenbelt has been utilized as a tool of modern planning paradigm. Despite its positive impacts, the government has relaxed regulations on greenbelts since early 2000s. In June 2014, the Korean government announced excessive deregulation of the greenbelt policy. Due to it, an acceleration of developments on greenbelts has been anticipated. Some of academics and civic groups are criticizing an attitude of the Korean government promoting policies without consideration to which degree environmental qualities worsen owing to lifting the greenbelt policy.

To identify this problem, many studies have been performed in Korea. Major preceding studies display that lifting greenbelts cause urban sprawl and negative effects on environment. These studies adopt generally qualitative assessment. However, it has been limited to get quantitative data that people require. To overcome limitations, this study implements an empirical analysis to confirm quantitative degrees of environmental improvement and deterioration by lifting greenbelts.

This study is based three research questions. First, which degree greenbelts have performed original functions. Second, which degree lifting greenbelts aggravates local environmental quality for the observed period. Last, which degree environmental qualities vary with lifting rate and the types of developments built after the lifting of greenbelts. Firstly, I hypothesize that greenbelts are effective in improving the quality of the local environment and preventing deterioration of the local environment. Second, the environmental quality of cities where greenbelts were lifted will deteriorate rapidly in comparison to those that retained their greenbelts. Third, the deterioration of the local environment will differ according to lifting rate and the types of developments built after the lifting of greenbelts.

To verify these, at first, the definition of environment is defined to air quality measured by NO2 and SO2 and water quality measured by COD and BOD. This analysis deals with 232 cities all over the country. Of these, 82 cities are included in the experiment group, which consists of cities that experience policies lifting greenbelts. The remaining 150 cities are in the control group; of these, 129 cities do not have designated greenbelts and 21 cities
have kept their greenbelts. The time scope of this study is from 1995 to 2010, as the deregulation of greenbelt policy began in 2000. To identify the time variance of environmental qualities, longitudinal data analysis was utilized. There are many factors affecting environmental quality except greenbelt policies. This method can effectively evaluate situations where environmental indicators have changed rapidly before the lifting of greenbelts. It is also suitable for comparisons within groups as well as between groups.

The findings of this study indicate the designation of greenbelts is effective to improve degrees of NO2, BOD and COD. Lifting greenbelts has aggravated all indicators than before. In addition, the greater the lifting rate, the greater the deterioration of SO2. Finally, a higher rate of housing development in lifted areas correlates with a higher rate of deterioration of SO2 and COD compared to other development types. These findings show that decision makers should discourage the lifting of greenbelts and, if greenbelts must be lifted, be aware of the effects of lifting rates and types of developments. For this, guidelines for adjustment of greenbelts should be reformed including standards of lifting rate and development type.

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Abstract Index #: 143
COLLABORATION IN AGRICULTURAL WATERSHEDS: BALANCING FARMER-LED WITH AGENCY-APPROVED
Abstract System ID#: 1131
Pre-organized Session: Collaborative Challenges on Working Landscapes

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Nutrients and associated contaminants running off of agricultural lands degrade and threaten water quality and aquatic ecosystems across much of the United States as well as internationally (e.g., USGS 2010). Yet policies and plans supporting conservation practices to reduce agricultural runoff rely primarily on incentivized voluntary actions by farmers. State, federal, and local agencies address these challenges at multiple scales by modeling the flows and sources of nutrients and related contaminants and by identifying critical management practices (often in targeted areas) for farmers to adopt (Genskow and Wood 2009). While the importance of engaging farmers to accomplish water quality goals is widely recognized, implementing plans on working landscapes remains very challenging. As noted by noted in Morton and Brown (2011, p 34), “[t]he assessment measures are not understood, the remediation plan does not feel local, and the prescribed strategies for water improvement are someone else’s, not the persons whose land management practices are being targeted.”

Some Midwestern watersheds are gaining experience with a collaborative watershed council model that relies on farmer leadership in identifying and addressing these water quality issues. This farmer-led model is also driven by farmer selected or defined performance measures and low-cost, locally determined incentives. Confidentially comparing their individual performance measure scores (e.g., a soil health index value) with others in the watersheds (without disclosing identities) has been changing norms around conservation behaviors (Morton and Brown 2011).
While highly promising, the approach poses institutional challenges for regulatory agencies and watershed planners. Namely, challenges include the pace of change, the necessity of “allowing” farmers to determine performance measures, and the need to link changes on the landscape to reductions in nutrient loads and improvements in water quality. Some level of initial catalyst and coordination is necessary to start a farmer-led watershed council, but how can agencies “step back” to let the process unfold while justifying funds for supporting an effort? The challenges become more pronounced if downstream stakeholders call for strong and immediate action.

This paper will explore these issues through the emerging examples of farmer-led watershed councils in west-central Wisconsin. Based on a highly successful model in Iowa (see Morton and Brown 2011, chapter 15), Wisconsin’s four councils began less than three years ago and have already made great strides. Preliminary analysis is based on interviews with key participants and with conservation and agency stakeholders observing from a distance with varying degrees of skeptical optimism. The paper will highlight challenges, limitations, and opportunities of this model.

References


Abstract Index #: 144
THE PRICE PREMIUM OF LOTS IN CONSERVATION SUBDIVISIONS USING SPATIAL ECONOMETRIC MODELS
Abstract System ID#: 1125
Individual Paper

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There continues to be a growing literature that assesses the benefits of conservation subdivisions (see, e.g., Arendt 1999, Carter 2009, Göçmen 2014). In a previous paper (Mohamed 2006), I examined 184 lots to assess one element of the discussions about conservation subdivisions: the price premium of lots in these developments. In this paper, I revisit those analyses by taking account of spatial autocorrelation: I hypothesize that lots located near to each other have a spatial spillover effect that should be accounted for.

Thus, while my 2006 analyses were restricted to ordinary least squares (OLS) regressions, in these analyses I use spatial econometric models, specifically, a spatial autoregressive (SAR) model, which considers spatial dependence to be a consequence of omitted variables (i.e., a structural process) and a spatial error model (SEM), which assumes spatially structured random effects in the unobserved error terms (see LeSage and Pace 2009 for a detailed discussion of the SAR and SEM models). I assume a queen contiguity weight matrix to model the spatial relationship between lots, where neighboring lots are identified based on a shared border. I used a shared border to define neighboring lots because I am interested in the spillover effects of one lot on another. Both models confirm the spatial spillover effect, that is, the value of a lot, particularly a lot in a conservation subdivision, strengthens the value of neighboring lots in the subdivision.

The results differ in magnitude from the OLS models examined in 2006. While in Mohamed (2006), I found that lots in conservation subdivisions carried a premium of about 13% over other lots, this research finds a smaller effect in both of the spatial models examined, about 9 percent. According to the SAR model, the direct effect of a lot in a conservation subdivision is to add about 5 percent to the value of the lot. The indirect, spillover effect of other lots in the conservation subdivision is about 3 percent. (Spatial error models cannot be disaggregated into direct and indirect effects.) Similarly, as lot sizes increase, the value of land falls, but again the magnitude of the decrease is smaller when compared to the OLS analyses in 2006. Some of the other location variables that were
significant in the 2006 analyses are not significant in these analyses, namely, distance to the coast and distance to
scenic districts.

Overall, these analyses point to the utility of using spatial spillover models: Not taking account of spatial spillover
effects may overstate the direct price premium for lots in conservation subdivisions. More importantly, it is the
collection of lots in conservation subdivisions that plays a role in determining the value of these lots, rather than
the lot itself.

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  of Planning Education and Research 34(2): 203-220.
  Press.

Abstract Index #: 145

SHARING THE LOAD: AN EXPLORATION OF THE PUBLIC’S ROLE IN SUSTAINABILITY PLAN IMPLEMENTATION

Plan implementation continues to be a vexing problem for both practitioners and researchers (Laurien et al. 2010, Berke et al. 2006, Brody and Highfield 2005). And yet, empirical research provides little guidance to
practitioners hoping to move from an approved plan to action. One common implementation technique is to
create a citizen advisory committee (CAC) specifically focused on realizing a plan (Williamson and Fung 2005).
Examples of CACs exist in most, if not all, American cities—the Salt Lake City Redevelopment Advisory
Committee, the Washington DC Bicycle Advisory Council, and the San Diego Community Forest Advisory Board—but such public participation in plan implementation has largely been ignored by urban and environmental
planning researchers. This paper evaluates the role and impact of CACs in plan implementation in moderate and
large American cities with community-wide sustainability plans. Additionally, the study identifies ways in which
sustainability planners can actively share responsibility for implementation with a CAC.

The data source for this paper is 36 in-depth qualitative interviews with sustainability planners in American cities
with a population over 100,000 and an adopted community-wide sustainability plan. Each interview covered the
history of sustainability planning in the city, early implementation progress, the CAC’s role in planning and in
early implementation, and the sustainability planner’s relationship to the committee. The interview sample is
drawn from a larger national scan of sustainability planning in 76 cities. In 11 of the interviewed communities, the
CAC was involved in planning only and in 25 of the interviewed communities, the CAC was involved in planning
and implementation.

The paper identifies the areas that are the most problematic for sustainability plan implementation in the 36
interviewed communities and therefore, where CAC engagement could have the largest benefit. Next, CAC roles
in plan implementation are analyzed and compared to the relative significance of the problems that the CACs
addressed. Finally, to determine if the implementation CACs’ work has a measurable impact, the speed of
implementation in the 25 cities that formed a CAC and the 11 that did not is assessed. This analysis shows that
public participation can help move implementation past some, but not all, implementation barriers. The paper
concludes with a discussion of the sustainability planner’s role in facilitating substantive work by the CAC that can impact the most common implementation barriers.

The 36 CACs demonstrate that there is an important role for citizen advisory committees in sustainability plan implementation, but not every CAC had the same impact. The choices made by sustainability planners and their superiors in structuring the CAC had a major effect on how much the CAC was able to contribute. Several recommendations for practice can be extrapolated from the range of approaches and impacts that CACs have had in different communities. The most basic and most important recommendation is simply to form an implementation CAC. Some sustainability planners who did not take this step saw the time that it takes to manage a citizen committee as simply time taken away from moving forward with the work outlined in the sustainability plan. But as this analysis shows, the time invested in a CAC actually expands the sustainability planner’s capacity to implement the plan. After forming a CAC, the sustainability planner must direct the group’s energy to fully leverage their potential to support implementation. For example, CACs in the study revised the city’s building code to encourage green building practices, engaged in grassroots advocacy to support a plastic bag ban, and provided direct funding for downtown bike racks. In each case, there is an ongoing role for the sustainability planner in facilitating and sustaining the CACs work.

References


Abstract Index #: 146

A STUDY ON THE PUBLIC’S PERCEPTIONS TOWARDS SEA LEVEL RISE AND ADAPTATION PLANNING BASED ON SOCIAL MEDIA DATA

Abstract System ID#: 1136

Individual Paper

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Planners at coastal communities are aware of the impacts of sea level rise (SLR) and aware of the needs for taking actions to mitigate the potential damages from coastal flooding. However, to gain support from residents and to conduct effective adaptation planning, planners and decision makers must understand how the tourists, business owners and local residents perceive climate change, SLR and adaptation planning, and how that perception affects their behavior towards rising sea level and adaptation planning. Furthermore, planners need to know what kind of information and in what delivery forms could be most effective in communicating with the public. Given the importance of social media in our daily life (Conroy & Evans-Cowley, 2006; Evans-Cowley, 2010; Schweitzer, 2014), this paper intends to address those major questions through the study of social media data.

Specifically, this paper intends to address the following questions: What is the general perception of local residents and businesses towards climate change and sea level rise? What are their attitudes towards adaptation planning as revealed in social media data? Most importantly, do the perceptions toward sea level rise and the need for adaptation planning differ? In other words, do we have evidence from the social media data showing
that even though people may differ on the climate change issues, but do they agree on taking adaptation step to adapt to coastal flooding, higher tides and intense hurricanes as a no-regret option? The answers to these questions are crucial to planners and decision makers in communicating with the general public about the impacts of sea level rise and gaining support for their adaptation planning efforts. Most of our analysis is being conducted based on the Twitter platform. Since we focus our research on coastal regions, we sampled recent tweets in Florida. For our case, several tools are being utilized to extract social media data. Specifically, a social-media data mining tool, MassMine, is used to extract social-media content from Twitter, Reddit, Tumblr (Beveridge and Van Horn, 2014).

We identified and browsed sea-level-rise-related topics within Twitter’s large collection of conversational data using the topic modeling techniques to study the attitude and sentiment of coastal communities. Topic modeling methods are also utilized to detect lower frequency topics which researchers may regard as important (Prier, Smith, Giraud-Carrier, & Hanson, 2011). We applied Latent Dirichlet Allocation (LDA) method to analyze phrases and topics of comprehensive and selected datasets. Lastly, the spatial patterns of top topics as well as people’s sentiment towards these topics are identified (Go, Huang, & Bhayani, 2009). Specifically we identified those tweets with top topics related to sea level rise, select tweets with georeferenced information, i.e., longitude and latitude and finally convert these tweets into points whose spatial patterns could be displayed using kernel density function in ArcGIS (Tsou et al., 2013). By applying Moran’s i and G’s statistics the hot spots and autocorrelation of these topics could be confirmed.

A preliminary sample of over 20,000 tweets has been collected in the state Florida by searching “flooding” on the MassMine platform. By applying the LDA to identify related topics in the data, several top topics related to flooding---i.e., “rain”, “worse”, and “beach”---were identified. In addition, improved LDA methods (deep learning for “deeply hidden” patterns) were then applied; as a result, “sea level rise” was also found to be a related topic with lower frequency. More data analysis and modeling are ongoing and the final results are expected to be out by the end of May, 2015, and a formal paper will be ready well before ACSP conference in October, 2015.

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safety engineering programs and protocols in place, these can and do fail when the their designed performance is exceeded by a greater than anticipated external force, or when power supply, computer controls and human error or neglect lead to system failures. Both seismic and tsunami cascading damages induced a system failure that led to one of the worst nuclear disasters in Japanese and global history. And yet, while there is clear evidence that globally, natural hazard disasters are on the rise, there has not been a strong response to address the fact that greater frequencies of hazard events will in all likelihood lead to more chances of Natech events to occur as well.

Concerns over these events have lead to the creation of several international study commissions sponsored by the UN, EU and OECD member countries. A number of Natech researchers over the last two decades who have analyzed high visibility Natech events such as the Kocaeli, Turkey earthquake, the Northridge earthquakes and Hurricane Katrina, have repeatedly warned that many major cities in the world face extreme risk to life and property because they are unaware, unprepared and have done little to reduce Natech risks. And while many researchers have outlined ways to better reduce such risk through integration of hazard mitigation and land use planning (among other measures), it remains unclear that any real headway has been accomplished in the US despite the clear warnings from recent large Natech events.

This paper reports on a survey of Natech risk assessment and mitigation planning in the hazard mitigation plans and comprehensive plans of the 30 most populous US cities. Although the results are only to be generalized to these populous US cities, they suggest that much works remains to evaluate and plan for Natech risks. If we assume our largest US cities ought to be at the vanguard of protecting large urban populations from Natech risk, then we have much to be worried about. Overall, while many natural hazards plans mention hazardous material release concerns, vulnerability assessment of populations at risk from industrial facilities and hazard materials storage and transmission lines is lacking. Moreover, very rarely does any comprehensive plan in the sample address the possibility of reducing Natech risks through land use planning approaches. The paper concludes with two examples of how communities could begin to better address such concerns from analyses in Seattle WA and Corpus Christi, Texas using readily available government data sources and models.

References

PLANNING FOR CLEAN AIR IN CHINA’S MEGACITIES: LINKING URBAN STRUCTURE AND AIR POLLUTION IN BEIJING

While Beijing is not alone when it comes to smoke-filled skies, this city of more than 20 million people has come to symbolize the environmental cost of China’s break-neck economic growth. Fine particulate matter (PM2.5) pollution has been a heated topic for discussion that also leads to health concerns greatly. Health studies have shown a significant association between exposure to fine particulates and adverse human health effects, such as
respiratory problems and cardiovascular diseases. The sources of PM2.5 could be from burning of coal and biofuel, dust from roads, exhausted gases from vehicles and industrialization. Air quality varies in urban spaces non-linearly and depends on multiple factors, such as meteorology, traffic volume, and land uses. It is of significant importance to investigate the contributions of population density, land use, transportation system and urban activities to the concentrations of PM2.5. The proposed research will also be one of the earliest assessments, as known, of examining the spatial variation of the PM2.5 concentrations and exploring the impacts from urban structure and activities in the Chinese context since the public release of real time PM2.5 data in major Chinese cities in 2013.

Most of currently reported models for linking the PM2.5 concentrations to land use and urban pattern, such as the most commonly used Land Use Regression (LUR) Model in environmental research, are global methods without considering local variations, which might introduce significant biases into prediction results. In this paper, a geographically weighted regression (GWR) model will be developed to examine the impacts of urban structure and activities on PM2.5 concentrations, in the Beijing metropolitan area. It aims to make contributions to development and new advances in bridging the LUR and GWR modeling, including expanding the scope of the predictor variables, new GIS approaches, and spatio-temporal considerations.

This research applies the GWR model to assess the exposure to fine particles in Beijing, and to understand the impacts from vegetation coverage, population density, land use pattern, transport network as well as human activities, e.g., catering services. It makes use of the data collected from around 100 air quality monitoring stations in the Beijing metropolitan area between January and December 2014. Combined with the road networks, demographics, distribution of catering services and land use map, the GWR model is built to analyze the contributions of those factors to the concentrations of PM2.5. By doing this, we will help policy makers identify the priority areas and design better plan for pollution controls. Of course, this research could also serve as the important inputs to the health effects study of long-term exposure to outdoor air pollution.

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NOT IN MY BACKYARD BUT LET’S TALK: WHEN ENVIRONMENTALISM MEETS DEVELOPMENTALISM IN CHINA

Abstract System ID#: 1170
Individual Paper

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Neighborhood-based environmental activism, or the so-called NIMBY, has been a global phenomenon that challenges many national and city governments in the decision process of major public projects. A popular account for the widespread of environmental protests concerns with the rise of environmentalism accompanying by the postmaterialist transformation. As Inglehart put it, developed countries have experienced “a shift from survival values to well-being values, from achievement motivation to post-materialist motivation.” Specifically, post-materialist transformation has shifted individual’s utility functions in two ways. For one, individuals might weigh the loss in their own life quality caused by environment externalities more than the gains brought by economic development. For the other, individuals might weigh the well-being of others and of future generations
more than that of themselves and their own generations. Both shifts could lead to more active participation in environment-related social movement.

While the environmentalism account implies that NIMBY is more likely to be observed in developed countries, the breakout of public protests against public project with potential environmental externalities in developing countries needs more careful investigations. The large-scale NIMBY movement observed in China in the past a few years, mostly caused by the government’s siting decision on paraxylene (PX) plants or garbage facilities, stands out as a very interesting case. As the largest developing country whose GDP still grows with an annual rate around 8%, developmentalism still dominates, not without challenges, the mindset of the government and the average people alike. At the same time, thanks to the disparity in development, environmentalism also gains grounds especially in China’s big cities. Apparently, none of these two discourses could claim a clear victory at such a transitional era. But why does large-scale NIMBY break out in China? Does the NIMBY movement suggest that China’s has already passed the tipping point and become more environmentalist? To add more complexity, while the social movement literature suggests that deprivation of participation rights itself could be the origin of social unrest, could the breakout of NIMBY movement be the result of lack of participation/transparence itself rather than that of the rise of environmentalism?

In this paper, we aim to answer these questions by analyzing a dataset derived from a survey we conducted over 2500 residents in four different Chinese cities in 2014. We’ll compare the factors accounting for the opposition of local residents two different projects with different environmental and economic implications, i.e. the garbage facilities and paraxylene (PX) plants. Although both projects have high environmental risks, a garbage facility is a necessary infrastructure serving the public good for urban residents whereas a paraxylene plant has more developmental implication. Preliminary results suggest that (1) public opposition to a garbage facility is more subject to individual’s concerns over own property values and health and safety risks, a pattern seemingly consistent to the NIMBY phenomenon; (2) however, for an economic development project such as PX plants, it is not concerns over own life quality, but rather lack of trust in government and deprivation of participation that drive up pubic opposition; and (3) whereas environmentalist views do not necessarily correlate with stronger opposition to either project, concern over socio-economic development reduces the likelihood of opposition to garbage facilities.

References


PHOTOVOICE: VISUALIZING VULNERABILITY AND ADAPTATION

In this paper, the author explores the benefits and challenges of Photovoice for investigating the impacts of climate change and cultivating effective adaptation particularly for the disadvantaged populations. Few planning scholars and practitioners have developed systematic adaptation models or tools to address climate-related risks and vulnerability from the perspectives of affected communities. Photovoice, as a method of participatory action
research (PAR), has been applied in multiple fields including public health and education to analyze critical issues and promote changes among marginalized populations, such as the disabled and women (Krieg & Roberts, 2007; Strack et al., 2004; Wang, 1999; Wang & Burris, 1997). This research project has utilized Photovoice in three disadvantaged communities in metropolitan Manila and Cebu of the Philippines to examine vulnerability and adaptation via the local lens. During the project, each involved community participant is equipped with a smartphone (with a camera) as well as the fundamental training of the methodology and photography. These participatory photographers take photographs related to hazards and adaptation, develop narratives, upload these to the social media platform, and collaboratively advance action plans and disseminative tools, including participatory mapping and changemaking teams. It demonstrates the opportunities and obstacles of Photovoice for climate adaption and community capacity building in the disadvantaged communities. Furthermore, this paper explores how Photovoice can be contributed to the field of planning for social justice and community change integrating the natural and built environment.

References


Abstract Index #: 151

PLANNING FOR WATER EFFICIENT DEVELOPMENT

Abstract System ID#: 1206
Individual Paper

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Many regions are reaching the ceiling of available water supplies, making it necessary to re-think water consumption habits and management practices. California is one such place. The state is in the midst of a record-setting drought, and there is mounting evidence that greater scarcity lies in the future (Andrew, forthcoming). Yet, California also has a growing urban and suburban population (California Department of Finance 2014). With less water and more people, sustained and systemic reduction in statewide water use is imperative.

In residential areas, better managing outdoor water is a critical component of reducing total urban and suburban water consumption. Outdoor water can comprise as much as 70% of a household water budget (Johnson and Loux 2004). The factors that drive outdoor water use are not documented in many locations, however, and findings from existing studies are often not extensible to new regions (Arbués et al 2003, House-Peters and Chang 2011). Further understanding the factors that drive outdoor water use is necessary to inform designs and plans that promote urban water efficiency.

This study evaluates seven years of monthly water data from over 300,000 households in the East Bay Municipal Utility District of California (EBMUD), an area with highly heterogeneous microclimates, housing typologies, and demographics. The analysis focuses on the relationship between household water use and local environmental factors – vegetation, weather, and land form –by implementing a panel data model. The results from the analysis indicate directions for the future water-efficient city, including possible adaptations to land cover and urban form.
Planning organizations throughout the United States are attempting to mitigate and adapt to the imminent consequences of a warming planet. Cities pose an immediate threat to and opportunity for improving the capacity for climate-induced impacts to citizens, businesses, and society at large. Indeed, with the majority of humans now living in urban areas, of paramount importance is developing effective approaches to reducing emissions of climate warming gases, and ameliorating the impacts to those most impacted by extreme weather events. While mitigation of greenhouse gases (GHGs) is well underway by many cities in the Western Hemisphere, adaptation strategies are only emerging. Even fewer are examples of processes and plans that directly reduce the implications of climate change on urban citizens, and especially those who are least able to cope with extreme climate events (e.g. flooding, urban heat islands, tropospheric ozone, etc.).

To address these challenges, planning organizations need to know about effective approaches that reduce vulnerability and improve the resiliency of local communities, while providing guidance for adapting to the imminent threats of climate change. Our paper assesses human vulnerability to heat stress and degraded air quality by engaging local planners, community organizers, and researchers in a ‘research to action’ model. By pairing a local university with regional stakeholders, we develop a hazard-specific definition of human vulnerability and the extent to which specific communities are impacted by urban heat stress and degraded air quality. Ours is a novel approach to linking citizen-based participatory governance with data intensive mapping exercises that forecast the social, environmental and economic impacts of alternative spatial options. We apply our approach to the City of Portland’s (OR) recently adopted ‘Climate Change Preparedness Strategy’, which focuses on social and institutional adaptation. Our paper describes this adaptation strategy, and assessing three dimensions of vulnerability – exposure, sensitivity, and adaptive capacity. Further we describe our ‘research to action’ model, which entails a series of workshops with local stakeholders that help to characterize Portland neighborhoods in terms of climate-induced stressors specific to urban heat, urban form and land use stressors specific to air quality, interaction of the two, and specific ‘hot spot’ neighborhoods experiencing both. These resulting maps provide an intra-urban comparative perspective, which are further integrated with relevant land use, land cover, transportation data to identify specific stressors by neighborhood. The identification of neighborhood-scale stressors, for example, urban heat islands within socially vulnerable areas, enable stakeholders to identify leverage points for potential short- and long-term strategies. The results are captured in

References


Abstract Index #: 152
NEIGHBORHOOD-SCALE CLIMATE ADAPTATION: REDUCING HUMAN VULNERABILITY TO URBAN HEAT STRESS AND AIR POLLUTION

Abstract System ID#: 1243
Individual Paper

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a single online interactive resource allowing individuals, communities, and relevant public and private organizations to query and assess the urban heat and air quality of a specific neighborhood. We conclude with a description of the central tenets that enabled our research to action model to be implemented in the Portland region. Although our paper focuses on Portland, the processes we’ve developed for engaging researchers and planners are generally applicable, as are our findings.

References


EXAMINING PLACE-BASED RESILIENCE UNPACKING MEANINGS OF RISK AND VULNERABILITY AMONG MARGINALIZED POPULATIONS

Abstract Index #: 153
EXAMINING PLACE-BASED RESILIENCE UNPACKING MEANINGS OF RISK AND VULNERABILITY AMONG MARGINALIZED POPULATIONS
Abstract System ID#: 1244
Individual Paper

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The idea of resilience and resilient cities has become the subject of recent inquiry among policymakers, practitioners, and the general public. Walker and Salt, in their influential book on resilience thinking propose that resilience is “the ability of a system to absorb disturbances and still retain its basic function and structure” (Walker and Salt, 2006). Both ideological and disciplinary orientations impact and influence Walker and Salt’s definition, but there is widespread agreement that the “system” under consideration must include the built, natural, and social environment and the term social-ecological resilience (Adger et al., 2005) appears to capture the dynamic nature of urban environments. For planning practitioners, the term “resilience” itself, immediately provokes the questions, resilience “of what” and “to what” (Carpenter et al., 2001). Cutter et al. (2008) proposed a place-based model of resilience which considered ecological, social, economic, institutional, infrastructure, and community variables in conceptualizing and measuring the resilience of neighborhoods and communities.

In this paper, I examine different understandings of risk and vulnerability to further understand and develop Cutter’s framework: the Disaster Resilience in Place (DROP) model using preliminary data gathered from field work in Jamaica Bay, New York in 2014. The region around Jamaica Bay, with its many neighborhoods and varied populations, reflects the challenges of understanding and defining community resilience especially in the wake of large-scale socio-ecological disturbances such as Superstorm Sandy in October 2012. In the course of eighteen months after the disaster event occurred, this research engaged residents and community organizers who were affected by Superstorm Sandy to better understand the resilience capacity of their neighborhoods. Interviews, focus groups, and participation in community meetings and events were directed towards: 1) understanding the extent of community service networks in the region as well as current political and social issues; 2) the impacts of Superstorm Sandy in specific neighborhoods and communities; and 3) broader concerns and gaps affecting social and ecological sustainability in the region. Beyond this, however, the research also focused on broader historical contexts, tracking changes in the environment, infrastructure, demographics, economics, and politics that have shaped the current state, individual as well as shared understandings of community resilience among members of the Jamaica Bay region that were consulted for this study.

Poor people, affected with a myriad of economic challenges appeared less prepared to engage with both the immediate effects and medium/long term impacts of natural disasters. There is need for more critical education
about the idea of resilience as well broad citizen engagement in planning for resilience to natural disasters so that the most vulnerable populations are not left behind and further marginalized as a result of natural disasters.

References

Abstract Index #: 154
**LINKING COMMUNITY DEVELOPMENT TO CARBON MITIGATION: THE CASE OF LOW-CARBON COMMUNITIES IN URBAN CHINA**

Abstract System ID#: 1257
Individual Paper

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China has become the largest CO2 emitter in the world since 2007, but its per capita carbon emission is currently only one-fifth of that in the United States. The fact that China is expected to turn an estimate of 350 million rural residents into urbanites over the next 20 years calls for extra urgencies for China’s carbon control. Among various strategies for carbon mitigation, the idea of a low-carbon community in urban areas has obtained increasing recognition with the rise of a variety of low-carbon community initiatives. This represents a shift in China’s climate policy which used to focus disproportionately on production-side carbon control.

Existing literature on community-level climate action conceptualizes community as (a) a means through which changes in social practices and behaviors to produce less carbon intensive lifestyles can be achieved (Heiskanen et al., 2010; Middlemiss and Parrish, 2010; Moloney et al., 2010); and/or (b) a site where appropriate forms of technology may be developed and deployed. The success of such action is dependent upon “community capacity”, or the ability of the community in question and its members to make changes by drawing on the resources available to them individually and collectively” (Middlemiss & Parrish, 2010, p.7561; Ivey et al., 2004; Newman & Dale, 2005; Rydin & Pennington, 2000). The prospect of community capacity building is, however, ambiguous in China given its mostly authoritative planning system and a short history of community development.

This paper examines the relationship between community capacity building, the socio-institutional environment of community-level activities, and performance of a low-carbon community in urban China. Here a “low-carbon community” is defined as a neighborhood that incorporates some low-carbon technologies, such as green buildings, on-site renewable energy sources and waste management systems, into its design and/or operation. By revealing this relationship, the paper helps to understand to what extent and under what circumstances the community approach can contribute to the goal of carbon mitigation.

Taking three communities composed of green buildings as an instrumental case (Yin, 2009) of low-carbon communities, the paper is focused around three questions: (1) What activities are taking place in these communities relative to green buildings and how are these activities organized? (2) Why are some communities doing a better job in the creation/maintenance/management of green buildings than others and what is the role of community capacity? (3) What are the incentives and barriers for communities to utilize green building technologies in order to achieve environmental goals?
The paper is based on 40 semi-structured interviews with a variety of stakeholders, including community residents and organization members, developers, property management companies, local government officials, green building experts, and etc.. It is also based on secondary data sources, such as policy documents, media reports, and archival records. In addition, information is collected through multiple field trips to studied communities. The strategy of triangulation is used among different sources of data. While this research is on-going, my preliminary findings show that the success of a low-carbon community in urban China is dependent upon the formation of corresponding institutions and, in particular, a partnership where public, private and civic actors fully participate in related activities and coordinate with each other.

References


Abstract Index #: 155

RESEARCH ON SPATIAL CORRELATION OF THE REGIONAL HAZE POLLUTION AND HEAVY INDUSTRY DISTRIBUTION: BEIJING, TIANJIN, HEBEI OF CHINA AS A CASE

As the Beijing’s record breaking 175 days of high pollution alarming in 2014, the air pollution and climate change around Beijing and even across north China draws the world’s concern. It is widely argued by Environment experts and media that heavy industry, energy structure, automobile exhaust are three dominate factors to the severe condition, while in regional planning field rare studies have been conducted about the spatial correlation between the distribution of terrible haze and heavy industries. Thus in the regional spatial planning and industrial policy, what is the government’s priority combating the harmful haze and climate change?

The research and the preliminary results include three parts. Firstly collecting 13 cities’ monthly average index of PM2.5, the total numbers of days of pollution levels are calculated. Aided by the tools of spatial interpolation and contour on Gis10.2, the contour maps demonstrating the numbers of high-level pollution days are simulated. It shows two fog and haze poles—Zhangjiakou and Cangzhou-Baoding, and a trend of intercity diffusing. Secondly, the analysis is conducted on spatial correlation between hazed days and location quotient of 6 heavy industries consisting cement, steel, coking, heat-engine plant, chemical engineering and non-ferrous. Obviously, there exists an appreciable relativity between the number of high-level haze days and heavy industry concentration standard. Further, based on the SPSS, the multiple linear regressions between the numbers of high-level hazed days and the 6 heavy industries’ location quotient make it clear that the concentration of cement and steel are two main contributors.

This paper also analysis the recent central and local policies aiming to ease air pollution. It argues that although the central and provincial government emphasis on the transformation of regional industry structure, some severe contaminated cities are not proactive.
According to the guidance of central government, taking the geographical and economical characteristics into account, this study at last tries to put forward suggestions that the time sequence for the regional transformation of industry and spatial structure should be set scientifically.

References


LAND USE PLANNING FOR CLIMATE CHANGE ADAPTATION ON THE LAURENTIAN GREAT LAKES

In addition to its ocean coasts, the United States enjoys substantial inland freshwater seas—the five Laurentian Great Lakes. These lakes extend some 750 miles from east to west, touch some 4,500 linear miles of U.S. shoreline, and cover a combined surface area of about 95,000 square miles, roughly the size of the United Kingdom. As with ocean coasts, the Great Lakes are large enough to generate substantial hazards to shorelands both from ongoing erosional processes and periodic storm events. Great Lakes coasts are different from ocean coasts, however, in several key respects physically and institutionally. Most prominently, they are geologically young features subject to background erosion rates of about 1-2 feet per year throughout much of the basin, while simultaneously subject to fluctuations in standing lake water levels on the order of 1 or 2 meters over the course of decades (Norton and Meadows 2014). Because of those fluctuations, Great Lakes shorelines can appear to be retreating lakeward (accreting) for extended periods while lake levels are low, only to move substantially inland as water levels again rise. It is not clear how climate change will affect the Great Lakes overall, but it will likely increase the frequency and intensity of storms (Gronewold et al. 2013). Institutionally, the Great Lakes are also unique because most of the states bordering them are Northwest Territory states with civil townships (i.e., in addition to counties and municipalities), yielding highly fragmented local governance of Great Lakes shorelands. All of the Great Lakes states have also applied the Public Trust Doctrine to their Great Lakes shorelands, yielding state-local legal and policy institutional arrangements that are highly diverse and complex (Norton et al., 2011, 2013).

This paper will present a systematic analysis of local efforts to plan for the management of Great Lakes shoreland areas through master plans, and to implement those plans through zoning codes and infrastructure policies, focusing on coastal Michigan localities. The paper will first provide a brief overview of the physical attributes that make the Great Lakes unique, along with a brief description of the federal, state, and local enabling authorities and other institutional arrangements that structure planning, regulation, and policy adoption by coastal Michigan localities. The paper will then report findings from the systematic content analysis of local master plans and zoning codes conducted for selected coastal Michigan localities in the mid 2000s and again in the early 2010s (for those localities that updated plans or amended codes), along with findings from a survey a planners and other administrative officials conducted in the mid 2000s. The paper will also report findings from several selected case study analyses of current local efforts to adapt their master planning in the face of climate change—during a period of dramatic increases in lake water levels following an extended period of low levels. Finally, the paper will
conclude with a brief analysis of the applicability of these findings from Michigan to other Great Lakes coastal settings.

References


Abstract Index #: 157
IMPACT STUDY OF URBAN SPATIAL FACTORS ON RESPIRATORY HEALTH AND THEIR PLANNING IMPROVEMENT

Air pollution, especially particulate matter (PM), has become a significant issue in urban environment, and has caused increasing incidence of respiratory diseases. Empirical study is needed to enrich the concept and planning of healthy city that has gradually become the center of attention. Based on the studies of the relationship between PM and respiratory diseases and between built environment and PM concentration, this paper investigates the impact mechanism of multiple urban spatial factors on incidence of respiratory disease with a focus on lung cancer, and also explores methodology to improve planning for healthy city.

This paper will 1) analyze spatial distribution and variation tendency of lung cancer patients in Shanghai, 2) build an empirical model for the impact mechanism at both individual and neighborhood levels, explore spatial factors at urban, neighborhood and housing levels, such as land use, density and housing type, and identify spatial factors with significant impact on respiratory health and their magnitude of impact, and 3) simulate the built environment, wind field and PM2.5/10 distribution of typical high-incidence neighborhoods, and conduct scenario building based on adjustable significant spatial factors. Planning index and principles will be improved accordingly to adjust PM distribution and mitigate its exposure to human beings. The paper attempts to provide an empirical basis for planning a healthy city in order to decrease the incidence of respiratory diseases.

References

POLICY ANALYSIS OF GHG REDUCTION PROGRAMS IN CALIFORNIA

In this study we assess the potential for established greenhouse gas (GHG) reduction policies and programs in California to achieve their reduction targets/potential given implementation constraints. California has an ambitious and well-developed program for achieving significant GHG emissions reduction as established in the Global Warming Solutions Act of 2006 (a.k.a., AB32). The State has approximately 31 individual policies and programs that are being implemented to achieve 1990 emissions levels by 2020 and ultimately move the State towards an 80% reduction below 1990 by 2050 target (Greenblatt 2015).

In theory these policies and programs add up to meet the desired 2020 target and State (State of California 2014) and independent (Greenblatt 2015) analyses report that it is on track to do so, but implementation is rarely perfect. Real world constraints such as funding, political viability, administrative feasibility, compliance, and other related factors likely limit the attainment of full implementation. A policy analytic approach involving quantitative and qualitative forecasting is used to develop probability estimates for implementation that will then be used to adjust GHG emissions reduction targets/potential. The product will be an expected GHG reduction and a set of probabilistic estimates of the likelihood of achieving overall AB32 GHG emissions reduction targets.

To estimate GHG emissions reduction, we employ the CALGAPS model developed by Jeffery B. Greenblatt of Lawrence Berkeley National Laboratory, which has already been used for this purpose (see Greenblatt 2015). To establish probability estimates, we use a combination of quantitative and qualitative forecasting techniques depending on the particular variable of interest. For example, to estimate the likelihood of achieving the Renewable Portfolio Standard (RPS), we use a quantitative forecast based on current and historical data prepared by the California Public Utilities Commission (see CPUC 2014). And, to estimate the likelihood of achieving the CPUC Strategic Plan for efficient building we employ the Delphi method (a qualitative expert consensus-building process).

Initial findings indicate that implementation success varies. Some programs are exceeding expectations whereas other programs are showing little progress or are difficult to measure. Many states are looking to California as a model of state-level policy for reducing GHG emissions. This study provides insights that other states can use to more carefully develop their suite of policies. Moreover, California can use these results to adjust and develop policies that will be successful in achieving the significant 2050 reduction targets. Finally, this study also contributes to the general understanding on change change policy implementation and identifies key variables and causal relationships (Wheeler 2008; Drummond 2010).

References

TRAP (TRAFFIC-RELATED AIR POLLUTION) IN SHANGHAI

Abstract System ID#: 1344
Individual Paper

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Although PM2.5, one of the most dangerous types of air pollution, is widely studied in Europe and the United States, it is now recognized as becoming very serious in other parts of the world, especially China. This paper is about Shanghai’s traffic-related air pollution (TRAP). We analyze the PM2.5 levels between 2002 and 2012. As in most locations, the health consequences of TRAP severely impact the vulnerable population with respiratory diseases, the elderly and children. The research focuses on TRAP by year and by location. The intertemporal changes are measured by descriptive statistics (kilometers traveled and fuel consumption by vehicle type). Then, we applied the Gaussian Dispersion Model (GDM) modified by the Kriging Interpolation to analyze and visualize the intra-regional air quality variations in and around the first ring (West/East of the Inner City) and the second ring (West/East of the Suburb) in the City of Shanghai. Finally, we introduced the concept of the TRAP-SHHPA (Spatial Health Hazard Priority Area) to help air quality planners to prioritize focus areas.

The main findings are that cleaner emission standards, restrictions on the use of certain vehicle types in central districts, and elevated freeways reduce PM2.5 concentrations in the city center. On the other hand, TRAP-PM2.5 levels are increasing in the primarily residential suburbs. Shanghai TRAP-SHHPA analysis highlight the location where TRAP- PM2.5 emissions levels and/or the vulnerable population concentration levels are higher. The Northwest and Southeast Shanghai (Yangpu, Jiading, Hongkou, and Zhabei Districts) were the two regions that were facing the severest PM2.5 effects. The paper will conclude with planning implications and future research directions.

References

Urban form, land use patterns, and the type of structures significantly influence a city's energy needs, and consequently, its greenhouse gas (GHG) emissions. Engineering and design of urban form is an important strategy for managing climate change and other environmental impacts of energy use, as well as being key to the livability of cities. This study develops a longitudinal network model to examine trends in energy use and carbon emissions associated with urban form, land use patterns, buildings, and travel behavior. The uniqueness of this conceptual model rests on the notion of connected infrastructure that integrates energy use in separate categories (vehicles, travel infrastructure, and buildings) into a network where each activity node is dependent on other nodes of both similar and different activities. In this connected infrastructure, residential energy demands are determined in part by the location and type of retail, entertainment, and commercial activities and on the patterns of linkages among them. This model offers an excellent means to examine trends in energy use and carbon emissions associated with urban form, land use patterns, buildings, and travel behavior.

The question of what patterns and forms of land use and building types offer significant gains in energy efficiency is particularly salient given the impending growth in demand for new housing. According to recent estimates, the current housing stock will have to be expanded by about 50% by 2030 to accommodate the projected new households (Pitkins and Myers 2008). A small percentage of the new housing units (0.2 to 0.6 percent per year) is expected to be replacement units. Therefore, the development characteristics of the new units in terms of their location, density, material use, and design, as well as their fit with the existing urban fabric, will have a significant impact on future energy use.

This study aims to find new insights about the relationships between urban form/land use patterns and energy use in order to better manage urban planning and development. While there has been a number of illuminating studies on urban form and its energy implications, important unanswered questions still remain. Specifically, the connection between energy use and the level of compactness in residential land use has been the focus of several studies, but the contribution of a more expanded set of characteristics about settlement patterns on energy and emissions have not been attempted to date. Some prominent studies such as those by Norman et al (2006) and VandeWeghe and Kennedy (2007) include life cycle energy impacts of transport and buildings. Results show significantly lower energy use for compact areas. While population density is certainly a key indicator, it is important to understand how other urban system characteristics such as land-use diversity and local retail and service availability affect energy use. Understanding a larger set of urban characteristics enhances the design space for energy mitigation. For example, suburban neighborhoods with increasing numbers of employment and services could reduce vehicle miles traveled. Conversely a compact urban form with high population density could save less energy than expected if residents end up driving long distances to work or other shopping. The network model proposed here will be able to distinguish the evolution of the travel behavior and associated infrastructure networks as communities develop residential, work and service infrastructures.

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Abstract Index #: 161
CLIMATE JUSTICE AND THE AMERICAN URBAN RISKSCAPE: THE DISTRIBUTION OF CLIMATE AND WEATHER-RELATED RISKS WITHIN CITIES, AND THEIR IMPLICATIONS FOR CITY ADAPTIVE PLANNING
Abstract System ID#: 1371
Individual Paper

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Efforts to identify the high-risk areas within cities that are especially vulnerable to the impacts of weather extremes such as heat waves and floods developed rapidly in the last decade of increasing risk for urban, and especially coastal, populations. Geospatial analysis is increasingly used to evaluate associations of a range of vulnerability characteristics at the intra-urban scale, including socio-demographic, biophysical, built environment, infrastructural and housing characteristics to population health outcomes during extreme events, such as hospital admissions or excess mortality. These climate and health spatial analyses tend to confirm and recapitulate prior findings of significant health disparities found in high-poverty and minority neighborhoods that endure similar patterns of health disparities for chronic diseases and for other environmental exposures. To evaluate whether six large American cities follow this “climate injustice” spatial pattern, we use spatial regression analysis with indicators of social, built environment and biophysical characteristics at the census tract level to identify the distribution of risk and potential exposures to the hazards of climate extremes within the city. By mapping ‘neighborhood riskscapes’, places where residents might be vulnerable to hazardous exposures during extreme weather events, we identified places that historically accumulated a range of psycho-social and built environment hazards, risks and/or noxious exposures – places of environmental injustice. We discuss the need for current municipal planning for hazard risk reduction and climate resilience to identify risks at finer spatial scales and the neighborhood-level, and conclude by proposing a new framework for assessing the spatial scales relevant for city climate adaptation risk assessments that seeks to guide public investment in resilience to environmental change, heat waves, and flooding.

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Track 4: Gender and Diversity in Planning

Abstract Index #: 162
PLANNING POLICIES, RELIGIOUS CLUSTERS AND INTERFAITH DIALOGUE
Abstract System ID#: 9
Individual Paper

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Canada has witnessed a sharp rise in religious pluralism in the recent decade or so, also evidenced in a proliferation of Christian as well as non-Christian places of worship in metropolitan areas.
The growth of religious plurality and geographic proximity raises important questions about religious tolerance and conflicts. In the U.S. for example, the location of mosques has been a controversial land use issue, especially following the terrorist attacks of 9/11. The planning profession is challenged to accommodate religious places of worship, especially those of new immigrants whose religions differ from that of the Judeo-Christian faiths (Agrawal, 2009). In a bid to solve this problem, planners in Canadian metropolitan areas have resorted to siting religious places in vacant lands originally zoned as industrial or agricultural (Agrawal, 2009). Over time, such planning actions have led to the formation of religious clusters in a few places in which multiple institutions of different faith groups reside in close proximity.

This paper explores the role of physical proximity of places of worship and planning policies in facilitating interfaith dialogue. The research focuses on two religious clusters, perhaps unique in North America: one in the Greater Toronto Area, which emerged due to incremental zoning changes over time; and the other in Greater Vancouver, which came about by a deliberate policy of the local government. Using key informant interviews as the method, and Allport’s contact hypothesis as the guiding theoretical framework, it explores the effects of proximity and contact (interaction or encounters) on intergroup relations.

The findings suggest that physical proximity is not a strong factor in facilitating interfaith dialogue initiatives. However, proximity does seem to have an effect in creating a space for interactions and encounters to occur, which can lead to attitudinal shifts concerning the religious “other.” Planning policies and development plans have a limited effect on interfaith dialogue. However, the social capital developed through municipal projects can be channelled and sustained to stimulate interfaith dialogue, suggesting religious clusters as a distinct model of harmonious co-existence of multiple faiths.

References
Theoretical Framework
Little scholarly attention has been paid to planner-librarian collaboration, but a closer look at the two professions reveals similar histories and evolving institutional goals. Both represent civic-minded municipal institutions that must evolve and adapt to remain relevant and accessible to the communities that they serve (Whitesides 1998, Zabel 2011). Shifting demographics, worsening social inequality, and technology advances significantly impact both professions’ identities, organizational structures, and service missions (Bignell 1989, Clark 2005, Gordon 2007, Hayden and Ball-Rokeach 2007). Most importantly, planners and librarians have mutual commitments to social transformation through resident empowerment and capacity building (Innes, 1996). Newfield (2004) noted that horizontal, collaborative atmospheres rarely evolve organically in local planning settings. Planners must be able and willing to devise innovative participation processes that work with historically underrepresented citizens to transform themselves into agents “unburdened” by the powerful forces of personal and social disempowerment. Public libraries can be, and often are, central spaces of unburdening.

Public libraries provide critical democratizing spaces in cities. They function as public meeting grounds (Given and Lecke, 2003; Aabø, et al., 2010; McDowell, 2014), electronic mail and internet workstations (Mandel et al. 2010), public document repositories, grey literature archives (Jackson, 2005), adult education libraries, and workforce development centers (Rooney-Browne, 2013). Furthermore, libraries often attract patrons who are unusual suspects to mainstream local planning processes, including low income residents, youth, immigrants, and homeless/transient populations (Joseph, 2010; Williams and Edwards, 2011; Muggleton, 2013; Frederiksen, 2014). Third, libraries help residents cultivate their civic identities and promote individual and community empowerment—processes planners strive for in their own work (Gong, et al, 2008; Pitayi and Kamal, 2012; Griffis and Johnson, 2014). For these reasons, planners who are dedicated to creating more democratic communities ought to explore sustained collaborations with local public librarians.

Methodology
This paper combines content and meta-analyses (Gaber and Gaber 2001) with an exploratory, comparative case study design (Yin 1998). To begin, it traces the historical developments and professional goals of city planning and library science to illustrate how the two fields are well poised to support and reinforce one another as 21st century civic institutions. The second section compares two recent planner—public librarian collaborations, located in Chattanooga, Tennessee, and Pomona, California, respectively. Both initiatives combined the resources and research expertise of planners and local librarians to engage historically underrepresented and excluded residents in planning-related dialogues and capacity building activities. This paper is meant to spark an overdue dialogue about how librarians and planners already collaborate in cities, and how the two professions might build more substantial and sustainable relationships with one another in the future.

References

Abstract Index #: 164
FEMININE PUBLIC SPHERE – A CASE FOR NURSING
Abstract System ID#: 139
Individual Paper

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This paper asks how the planning and design can make public space inviting for nursing women. As such, it relates to the discussion on public space accessibility for different groups, practices and life styles. Its main assertion is that the practice of nursing, if not supported actively as a public and open practice, may deem women to exclusion and isolation. Following this assertion, is the claim that support of nursing women should be taken as public responsibility. The design and planning of public spaces – the physical platform for social interaction – is one facet of fulfilling this responsibility.

Building on preliminary research, this paper explores three contributing factors to the comfort of nursing women in public space: peer support, a sense of protection or privacy, and cultural signifiers. It moves to explore possible classification of public spaces that will inform us on the features of public spaces that contribute to women’s ability to nurse in them. The classification is based on five scales, and tested through a visual research tool. Nursing women were asked to point at surroundings that seem to them inviting or prohibiting to breastfeeding, and to elaborate on what in these spaces triggered a sense of comfort, or discomfort. It is hoped that the results may assist in creating guidelines for the planning and maintenance of public spaces which will make them more accessible for the practice of nursing, and thus better suited to serve as a democratic meeting place.

References

Abstract Index #: 165
NEGOTIATING DIVERSIFICATION: IMMIGRANT SETTLEMENT AND NEIGHBORHOOD CHANGE - THE CASE OF GREEKTOWN IN BALTIMORE CITY, MARYLAND

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The recent and rapid influx of immigrants from Latin and Asian countries into the United States generates many diversified neighborhoods throughout the country (Singer 2004, Maly 2005). This phenomenon could create new social dynamics in the neighborhoods due to the differences among new and indigenous residents, and could eventually lead to one of the possible scenarios: conflict, disassociation or collaboration. How planners, policymakers and community organizers can create and maintain a diverse yet collaborative neighborhood is a central challenge (Putnam 2007).

This paper investigates the new social relationships of the recent immigrants and indigenous residents in Greektown in Baltimore City in Maryland. This small and rather isolated neighborhood was once a European immigrant’s enclave in an old industrial city and still maintains the original ethnic characteristics. However in the recent years, it is accepting Latino immigrants and now they consist of more than 30% of the total population. Moreover, in addition to the Latino immigrants, there are new market-rate housing projects in the periphery of the neighborhood that has brought new types of residents, mostly young and professionals who prefer living closer to the downtown area. In this neighborhood, those three racially, ethnically and socio-economically different groups are facing each other in their daily lives. They need to negotiate each other on various occasions in order to make their living environment desirable to them. The paper illustrates those three groups’ social relationships in the neighborhood that suggest the possibility of the future of the neighborhood (Massey 1995).

Neighborhoods change due to various factors, and each neighborhood has its own reason to change. Although no single reason can fully explain neighborhood changes, scholars have vigorously discussed what causes
neighborhood changes. The term “neighborhood change” is often taken to mean demographic changes, such as an increase or decrease of a particular race and ethnicity, because demographic change could be a key factor in determining a neighborhood’s economic and physical character. However, it is often overlooked that changing demographic character means changing social relationships among various groups in the neighborhood, which is an important factor that changes neighborhoods. The Socio-cultural Approach to neighborhood change has been developed to explain how an individual’s adaptive activities that are based on his or her group’s culture, values, and beliefs changes neighborhoods (London 1980). The focus of the data collection is on knowing how their cultural differences such as language, beliefs, customs and history are manifested in their daily lives and the social relationships to the others in this small neighborhood.

The fieldwork conducted since the spring of 2012 includes interviewing approximately 60 residents, participant observation and a survey. Some of the findings are:

1) Strong identification as immigrants or immigrants’ descendants by Greek Americans may create room to accept new immigrants;
2) The Greek Americans lease the vacant houses to Latino immigrants and become economically dependent upon each other;
3) Third-generation Greek American’s return to the neighborhood and bring new ideas of what an ethnic neighborhood could be; 4) Latino immigrant’s second generation, who speak English, may become the key persons to bridge the gap between different groups; and 5) The new residents, young and highly educated, have an idea that “diversity is good” in their heads, which may help keep the neighborhood diverse.

The paper further investigates the policy implication and how the planners can work with this racially, culturally and socioeconomically diverse neighborhood in order to make neighborhoods stay diverse yet collaborative in this new era of immigration.

References

Abstract Index #: 166
THE BOUNDARIES OF CULTURE: NEIGHBORHOOD BRANDING IN MULTI-ETHNIC LOS ANGELES
Abstract System ID#: 256
Individual Paper

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Academics often refer to the occurrence of a “spatial turn” in the social sciences, in which explorations of “space” and “place” took increasing importance at the end of the 20th century in examining the evolution of society. As a result, academic research from a number of fields began to focus on studies of “place attachment,” or how and why people attach meaning to their environment. Designating particular neighborhoods as ethnic or cultural districts can be seen as an attempt to create place attachment, and yet, as has been shown, these efforts may instigate conflict in multi-ethnic neighborhoods. In this context, several questions can be raised about how
different uses of and experiences in urban space can lead to varying definitions of culture, community, and a neighborhood’s boundaries.

With numerous overlapping and intersecting ethnic communities, Central Los Angeles is a prototypical site for better understanding the new dynamics of place attachment, urban design, and community development in multi-ethnic urban areas. It is in these areas that the notion of the ethnic enclave no longer holds. This dissertation seeks to examine the ways in which multi-ethnic communities operationalize culture, negotiate boundaries, and define their community and neighborhood. Specifically, my dissertation will address the following research questions: How do multi-ethnic communities perceive of and experience shared urban space? How do multi-ethnic communities occupying the same or overlapping neighborhoods operationalize culture and claim territory? Is there conflict/contestation generated because in shared spaces, and how is this resolved?

To answer these questions, this paper investigates the development and designation of four neighborhoods in Central Los Angeles—Little Armenia, Thai Town, Koreatown, and Little Bangladesh—through various ethnographic methods. I employ open-ended, semi-structured interviews and cognitive mapping exercises with community stakeholders, such as community-based organizations, resident organizations (Parent-Teacher Associations, business associations, etc.), merchants, property owners, and cultural institutions, as well as representatives from the local Neighborhood Council and city officials. Through discourse analysis of these interviews, I will investigate the extent to which different groups identify with the neighborhood, if they develop sentiments of territoriality of particular spaces or neighborhood institutions, and how these responses vary depending on the respondent’s ethnicity, occupation, and other demographic indicators.

This research also involves conducting a visual ethnography of the social and built environment to examine the ways in which culture is perceived of, mobilized, performed, represented, and negotiated in shared spaces. This includes mapping the distribution of ethnic businesses (formal and informal), community organizations, socio-cultural activities such as festivals and public art, and examples of cultural hybridities. Documenting how different ethnic groups use, appropriate, or change the built environment for social, cultural, and economic activities, and comparing these observations to my interview responses, will allow for a richer comparison between how the neighborhood’s culture and boundaries are defined, and how they are experienced.

While this research is on-going, preliminary findings indicate significant differentiations in how overlapping ethnic groups use and perceive of the same urban spaces, and a powerful influence of local politics in shaping opportunities for certain stakeholders. By offering a more nuanced investigation of how culture is operationalized in multi-ethnic urban areas, I will demonstrate the need to scrutinize how city planners and policy makers define the “neighborhood” or the “community”, and further unpack them as complex social, cultural, and psychological systems by which individuals create meaning with and within their environment.

References


Abstract Index #: 167

PLANNING FOR INCLUSIVE QUEER SPACES IN THE YBOR CITY NEIGHBORHOOD OF TAMPA

Abstract System ID#: 381
Individually Paper

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Some scholars have suggested that gay village development follows a linear socio-economic process in which an urban area in decline begins attracting gay residents and gay businesses, until the area becomes more attractive to the wider (non-LGBTQ) population resulting in the neighborhood’s assimilation into the heterosexual mainstream (Collins 2004). Frisch (2002) argues that this is not an inevitable process, but one which is triggered by heterosexist planning interventions. Doan and Higgins (2011) found that in Atlanta municipal efforts to stimulate redevelopment along Peachtree Street in Atlanta, combined with a studied neglect of the Midtown gayborhood, pushed gay clubs and institutions away from the historic LGBTQ area in Midtown to more peripheral neighborhoods. In effect planning’s refusal to recognize Midtown as a Gayborhood enabled other efforts to cleanse neighborhoods and make them safe for capital investment (Doan 2011).

This paper examines the role of urban planning in the evolution of lesbian, gay, bisexual, transgendered, and queer (LGBTQ) commercial and residential areas in the Ybor City neighborhood of Tampa. Ybor City thrived in the late nineteenth century as a home for immigrant workers in the cigar industry, but after the Second World War many residents began moving out of Ybor City leading to a period of decline (Lastra 2006) followed by a series of economic booms and then busts. Historically when rents have been low in Ybor City, LGBTQ individuals have been attracted to the area along with artists and other bohemians. During the most recent economic recession, the GaYbor District Coalition was created to promote Ybor City as Tampa’s most LGBTQ friendly neighborhood. This paper explores the role of urban planning in stimulating development at certain points and at other times in constraining the development process. The paper explore whether planners in Tampa acted to enable and preserve this unique neighborhood (including its LGBTQ character) or made decisions that devastated those same areas.

This paper uses qualitative methods to explore the role of planning in the development of LGBTQ communities in Ybor City and Tampa using key informants knowledgeable about the various waves of gentrification in Ybor City and the role of planned municipal actions to stimulate or mitigate those urban developments. Other informants from the Ybor City Chamber of Commerce and GaYbor District Coalition provide a business perspective. Other input from a snowball sampling strategy of LGBTQ residents of the GaYbor area as well as nearby neighborhoods rounds out the data collection from the grassroots.

Research questions that are addressed in this study include:

1. What kinds of planning measures were used to stimulate urban reinvestments in Ybor? Were they successful? Did planning officials take action to preserve well-established gay areas or fuel rapid redevelopment?
2. How might planning create a more inclusive and stable GaYbor District without the related displacement effects on less well organized communities of minorities and immigrants?

References


Abstract Index #: 168
PLANNING FOR THE LGBTQ COMMUNITY - MOVING BEYOND QUEER SPACE
Abstract System ID#: 382
Roundtable or Informal Discussion Session

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This roundtable is part of the Inclusion Network established as an informal ACSP interest group of LGBTQ scholars and allies. The participants on the Roundtable all contributed chapters to the forthcoming publication from Routledge: Planning and LGBTQ Communities: the Need for Inclusive Queer Spaces edited by Petra Doan. The roundtable participants will discuss next steps in the ongoing effort to create more inclusive spaces for LGBTQ people. Participants will be asked to share briefly on one of the following topics:

- How can we ensure that LGBTQ neighborhoods are preserved and protected in the face of sweeping gentrification trends that threaten existing areas?

- How can we ensure that planning for LGBTQ spaces is fully inclusive of all LGBTQ individuals and communities, especially those communities of color and other marginalized groups that are not well represented in mainstream gay and lesbian groups?

- While many people and especially straight allies may feel that recognition of marriage rights will close the book on discrimination concerns, what kinds of LGBTQ planning concerns continue to need attention?

Moderator: Petra Doan

Participants (in alphabetic order)
Katrin Anacker, George Mason University
Michael Frisch, University of Missouri Kansas City
Kian GOH, Massachusetts Institute of Technology
Arianna Martinez, LaGuardia Community College
Joan Marshall Wesley, Jackson State University
Andrew Whittemore, University of North Carolina at Chapel Hill
Curt Winkle, University of Illinois Chicago

References

THE EFFECTS OF GENDER POLICIES ON PLANNING PRACTICE: ANALYSIS OF THE QUOTA LAW IN COLOMBIA

More than one hundred countries have adopted gender quotas aiming, in a way or another, to increase women’s representation (Chen, 2010; Franceschet, Krook, & Piscopo, 2012). Gender quotas are usually more focused on women’s symbolic representation rather than on women’s gains in terms of equity (Meier and Lombardo, 2013; Chen, 2010). In this way, most studies of gender quotas concentrate their analysis on the number of women entering political offices. A few studies look at the effects that an increased number of women within political
offices have on policies and strategies addressing women’s issues (Franceschet, Krook, & Piscopo, 2012). However, scant attention has been given to the effects of gender quotas on planning practice. Thus, using the quota law enacted in Colombia in 2000, this paper examines the extent to which local planning offices have incorporated the quota law and the effects that it has had on women’s issues including structural changes within the public sector and society.

Contrary to the experience of most other countries, Colombia’s quota law does not focus on elected positions, but targets high level decision-making positions within the bureaucracy at the national, regional and local level. Reports of the implementation of the law indicate that there is a high degree of compliance at the minimum level of the law at the national and regional level and in many of the provincial capitals. However this study examines on the Pacific region of Colombia where percentage of women in high positions was almost fifty percent for 2014. The paper provides a detailed appraisal of the report on quota fulfillment for the region, during the past ten years, and analyzes the variations within the region. Additionally, this paper reports on an assessment of the four main cities on the Colombian Pacific Region (Buenaventura, Guapi, Quibdo and Tumaco) contrasting the effect of the law on local planning offices’ composition and their plans. The methods used in this paper include archival analysis of planning office documentation on the recruitment of women and qualitative interviews with officials working at the planning offices. The research questions include: Will an evaluation of the local level planning offices in this region mirror trends at the national or regional level? Are women involved in high-decision making in the Pacific region, and if so, are they able to address women’s issues?

References

Abstract Index #: 170
IT IS ALL IN THE MIX? -THE SPATIAL DIMENSIONS OF ETHNIC RESIDENTIAL SEGREGATION-
Abstract System ID#: 413
Roundtable or Informal Discussion Session
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In the 1990s, a remarkable number of foreigners came to Korea during the development of Korea at that time, and we shared many regions with southeastern laborers, Chosunjok and Saetumin, compound with manifold nationalities and ethnicities. Particularly, Korean-Chinese constituted 33% of all foreigners. Their absolute numbers were 430,000 people. This information is based on data from the Ministry of Justice in 2009. We also focus on the point that illustrates new issues and cultures by Korean-Chinese. Especially in the case of Seoul, among all foreigners who live in the city (Seoul statistics from 2009) 75% are Korean-Chinese. Korean-Chinese have a nationality that is represented by China. However, their parents are Korean, and therefore they have Korean nationality as well. From the current situation, we cannot ignore Korean-Chinese anymore in the city as an ethnic minority. However, we do not consider them so that this situation makes them not foreigners or native Korean. In present, the biggest social issue is that Korean-Chinese have committed numberless brutal crimes in Seoul. Therefore, I decide to research the spatial problems to Korean-Chinese in Seoul for urban plan to Korean-Chinese.

The aim of this project is to find a segregation index for a better understanding of the relationship between Korean-Chinese and Seoul as the region of their habitat and work places. After a decade of lively debate on the nature of residential segregation and how to measure it, Duncan and Duncan (1955) concocted a segregation index focusing on dissimilarity. For more than 20 years afterward, the dissimilarity index severed as the standard segregation measure. It measured spatial segregation between social groups such as ethnic minorities. After
many years, researchers sparked new theories on the measurement of segregation, as they had different definitions of segregation. Therefore, some researchers started to make new indices to measure segregation and evaluated many other indices. Massey and Denton (1988) attempted to bring some order to the field by undertaking a systematic methodological evaluation of 20 potential measures of residential segregation, as identified in a survey of research. As a result, they classified five dimensions of segregation indexes. These dimensions explain different aspects of segregation.

I can expect three things from this project. First, this study provides way to create policies pertaining to Korean-Chinese who live in Seoul. We have little recognition of them compared to other foreign groups, as their appearances are similar to that of a native Korean. Secondly, in case of the Korean-Chinese residents, they are often illegal laborers in Korea. They have several reasons for doing this, even considering that the Korea industry structure operates via an exclusive hire system. These results could be used to motivate the Korean-Chinese to live legally. Not only can we understand and recognize our exclusive attitude, but this research result can resolve problems that can lead to conflict between Korean-Chinese and native Koreans. Third, Seoul strives to be global city in the world, as a global city is a condition of developing city brand value. However, there should be a challenge to segregation between natives and foreigners. This research serves to elucidate Korean attitudes to foreigners as represented by segregation and physical isolation of these groups in the city. This segregation appears as a wall to them. Clearly, these circumstances assist with an understanding of the demographic flow and uniqueness of the Korean diaspora.

References

Dayton has embarked on an ambitious plan to be immigrant-friendly. Dayton’s population has been declining since the 1960s, from a peak of over 262,000 to just over 141,000. Although Dayton’s population—52 percent White, 43 percent Black and 3 percent Hispanic (2010 Census)—is in decline, the immigrant population continues to grow. That sliver of the total population includes immigrants and refugees from more than 100 countries, including Russia, Nigeria, India, Turkey, Libya, the Philippines, and Mexico. The Welcome Dayton plan lays out a framework for government, businesses, schools, and civic organizations to act inclusively, integrate immigrants into the community, and celebrate diversity.

This paper will draw from fieldwork in Dayton including interviews with city officials and immigrant entrepreneurs; observation of community meetings; site visits in neighborhood with a concentration of property development driven by foreign-born residents; content analysis of city documents and website related to Welcome Dayton; content analysis of media sources such as newspaper, videos, and other materials covering the growth stimulated by the foreign-born population.

References

Abstract Index #: 172
THE RIGHT TO SUBURBIA: REDEVELOPMENT AND RESISTANCE ON THE URBAN EDGE
Abstract System ID#: 607
Pre-organized Session: Spatial Justice in a Changing Metropolis

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Suburbia has always been a site of social struggle. While not well documented in the literature, it has served as an important space upon which marginalized groups have registered claims to equal rights, citizenship, and a more just distribution of resources. For much of the twentieth century, these battles were largely fought over access to housing, schools, jobs, and the promised suburban “good life.” But in the past few decades, the tenor of these debates has changed. With the unprecedented movement of minorities, immigrants, and the poor to the urban periphery, the battles now taking shape are about far more “urban” issues, like gentrification and displacement.

This paper documents clashes over such issues in low-income Latino and Asian immigrant communities in the Washington, DC suburbs. It shows the intersection of debates over displacement with the rapid transformation of the region’s suburbs into more compact, dense, mixed-use, and walkable communities, especially those near transit. In case studies of two communities undergoing new transit-oriented “retrofits,” the paper probes questions about the broader impacts of contemporary processes of suburban spatial transformation on socially and economically disadvantaged communities. It also explores the significance of suburban social movements for achieving more equitable development and redevelopment practices.
FORMATION OF A LATINO GRASSROOTS MOVEMENT: THE ASSOCIATION OF LATIN AMERICAN GARDENERS OF LOS ANGELES CHALLENGES CITY HALL

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When the City of Los Angeles banned gas-powered leaf blowers in 1996, the law sparked one of the most dynamic grassroots campaigns by Latino immigrants in recent history. Latino immigrant gardeners, working with a small group of Chicana/o activists, organized the Association of Latin American Gardeners of Los Angeles (ALAGLA), which pressured city leaders to reverse the ban. ALAGLA pursued its objectives by engaging in the political process, taking direct action, advocating technological adaptations, and reframing the gardeners and their tools in a positive light. Turning public opinion in their favor, they persuaded city leaders to void the draconian elements of the ordinance, which included a misdemeanor charge, a $1,000 fine, and jail time for gardeners using the blowers. ALAGLA’s movement can be compared in some ways to earlier immigrant-organizing efforts by organized labor, notably the United Farm Workers and the Service Employees International Union’s Justice for Janitors campaign, but it is also distinguished from them by ALAGLA’s non-bureaucratic grassroots structure. The association’s campaign for social and economic justice shows the potential for collective action among marginalized immigrant workers and petty entrepreneurs in the informal economy.

References


CLIMATE CHANGE FROM THE STREETS: COMMUNITY ACTION FOR GLOBAL HEALTH IMPACT

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As the eighth-largest economy in the world and the only state in the U.S. to adopt a comprehensive program of regulatory and market-based mechanisms to achieve reductions in greenhouse gas (GHG) emissions, California represents an important site of inquiry. With the passage of Assembly Bill 32, the Global Warming Solutions Act of 2006, the state has become a world leader on climate change science and policy innovation. How California achieves GHG reductions while addressing the needs of socially vulnerable populations has important policy implications worldwide.

In this paper, I examine how the legitimization of a local scale of climate change has been highly contested in the State Capitol, as environmental justice advocates attempt to “rescale” California’s landmark Global Warming Solutions Act to focus on direct benefits to disadvantaged communities. I analyze this debate through the lens of
a four-year environmental justice campaign to enact “cap-and-dividend” legislation, better known as a Climate Change Community Benefits Fund. The adopted legislation mandates that a dividend (or rebate) be invested from a portion of the billions of dollars in cap-and-trade auction revenues in communities most impacted by air pollution. Through a combination of theoretical and policy-relevant research, this paper highlights the emerging epistemologies and scales of climate change in California as articulated by social movements, experts and subnational governments.

References


Abstract Index #: 175

#RESISTANCE TO STREET HARASSMENT: CONTEXTUALIZING ON-LINE ACTIONS IN A NEW ERA OF WOMEN’S RESISTANCE IN PUBLIC SPACE

Abstract System ID#: 763
Individual Paper

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Across the globe women are targets of street harassment — unwanted in-person comments or physical contact, usually sexual in nature (Bowman, 1993) — that limits their ability to access public spaces with the same freedom and ease as their male counterparts. During the past few years, increasing media attention and consciousness raising about street harassment has produced renewed interest in how women experience cities, and how to combat this issue in communities. In 2014, the organization Stop Street Harassment conducted the first ever national survey on the issue, revealing that 65% of women had experienced street harassment, and that people of color and those identifying as LGBTQ are disproportionately affected. The data signals a widespread and pressing safety issue in public space.

Looking back to the 1960s, the groundwork of the women’s movement provides a framework for understanding both individual resistance and collective organizing against street harassment. Looking ahead, social media and online forums are increasing options for resistance in two ways. First, virtual platforms allow for responses to harassment without requiring direct confrontation of harassers, thereby avoiding the risk of in-person escalation. Second, using social media as a tool of online activism (Sutton & Pollock, 2000) expands the reach of anti-harassment organizing efforts. This presents a unique opportunity to study the virtual world as an added public space for resistance.

Building on existing research on gender and the right to the city (Fenster, 2005), and social movements and social media (Castells, 2013), I examine how virtual public spaces are being used to address and resist street harassment on-the-ground. My research is motivated by the idea that public space is profoundly gendered, with significant consequences for women. This paper is guided by three research questions: (1) How is twitter being used to document and resist street harassment in public space? What can these virtual narratives tell us about experiences with street harassment? (2) How is twitter being used to contribute to the growing momentum
against street harassment? (3) Where does this fit within the history of the women’s movement, and more specifically, women’s resistance in public space?

My paper uses a qualitative approach to analyze data from the social media platform twitter. Over the course of three months I collected tweets related to street harassment based on a series of keywords and selected hashtags. Tweets are analyzed as micro-narratives, sorted by usage type (Evans-Cowley & Griffin, 2011), and compared to a timeline of street harassment related events and news stories from the same time period. Historical research contextualizes the current actions within the broader context of women’s resistance.

Although my research is ongoing, my preliminary findings indicate that tweets offer a rare, unsolicited window into lived experiences with street harassment, potentially offering organizers, practitioners, and researchers a new way for understanding and addressing a complex and pressing urban issue. Additionally, this research provides an example of how the women’s resistance in public space continues in the era of social media.

References

References


Abstract Index #: 177

THE TEXAS FREEDOM COLONY DIASPORA: THE ROLE OF FOUNDATIONAL STORIES IN AFRICAN AMERICAN PLACEMAKING & PRESERVATION IN EAST TEXAS

Abstract System ID#: 804
Individual Paper

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From 1870 to 1890, in the shadow of Reconstruction and the violent nadir of American race relations that followed, former slaves founded more than 500 “Freedom Colonies” or Freedmen’s Towns across Texas. Even though a variety of factors led to the depopulation of many Freedom Colonies, descendants of the original settlers—including those who no longer live in these settlements—continue to nurture their stewardship of the original land through annual celebrations and oral tradition, even as physical manifestations of place dissipate.

The aim of this study is to gain insight into how dispersed descendants’ diasporic attachments to Freedom Colonies shape their identities and catalyze their planning and historic preservation activities. The study is based on the hypothesis that memory, manifested in foundational or origin stories, provide meaning and thus serve to sustain attachment to Freedom Colonies. Second, research suggests that Freedom Colony foundational stories reveal a lost history of planning practice. And third, the study proposes that stories of African American placemaking and land stewardship can fill gaps between formal planning practice and informal conceptions of identity and geography.

The focus of the study is a network of Freedom Colony descendants and communities across three counties in Deep East Texas, which are linked by collective memory, kinship, and cooperative stewardship of their communities. First, archival and historical research was conducted to document how formal planning discourse and practice has defined the cultural landscape, historical geography, and planning issues in the region. Then, stories of settlement origins, cultural conservation practice, and contemporary planning issues were collected using ethnographic methods. During interviews, annual events called homecomings, and settlement tours, descendants shared the values and memories associated with settlement origins, as well as the influence of foundational stories on their current preservation and planning activities. To explore the significance of story to settlements on a larger scale, a summer event was held in partnership with Freedom Colony descendants, regional planning agencies, and the Texas Historical Commission during which settlement descendants from across the state discussed planning and preservation projects rooted in their settlement heritage. The event concluded with a dialogue between descendants and practitioners regarding the optimum role for formal planning and preservation organizations in shaping Freedom Colonies’ futures.

Findings from this research will contribute to planning theory, pedagogy, and practice by revealing new approaches to identifying and addressing gaps between conceptualizations of vulnerabilities, strengths, and priorities in formal planning and preservation, and informal notions of identity, cultural geography, and planning often invisible to students and practitioners. Learning the various ways descendants engage in “productive nostalgia” to maintain attachment to settlements can shed light on how future planners can perform fieldwork in a reflexive manner. The study’s deep description of early African American settlement origins, placemaking approaches, sustainability networks, and planning methods (absent from current planning history) expands our
conceptions of what constitutes planning and the variety of resources available to address issues in “invisible” communities such as these. Finally, findings and action steps proposed during public dialogues may constitute a nascent, grassroots Freedom Colony agenda that may serve to address power and equity issues more broadly in planning and preservation.

References


DIVERSITY FOR SALE: WELCOMING IMMIGRANTS AS A PATH TO GLOBAL CONNECTIONS

How do cities in the Midwest compete in an increasingly global economy? And what role can ethnic and racial diversity play in making a city competitive globally? Cities across the Midwest have started to tackle these questions and increasing insecurities about the success of their cities through a strategy of immigration attraction. Immigrants are seen not only as economic self-starters, but also as possible connections to the global economy (Zhou & Tseng, 2001; Steinhardt, 2013). Indianapolis, Indiana, is a city embracing the idea that immigration will foster economic development and city growth. Using qualitative methods and archival research, this paper examines the Sister Cities International program employed by Indianapolis to utilize immigrant transnational connections. This program has been used to justify investment into certain immigrant populations in Indianapolis and to initiate specific relationships with strategic cities around the world. What emerges are intentional efforts by Indianapolis to use local immigrants to build political and economic connections outside the Midwest - to countries like India, China, and Brazil. Local immigrant community-based organizations (CBOs) are vital to the success of the International Sister Cities program, both abroad and locally in Indianapolis. CBOs are often an integral part of emerging immigrant civil societies and play an important role in addressing their needs within the community (Theodore & Martin, 2007; de Leon, 2012). In the Sister Cities International program, immigrant leadership functions as facilitators, representatives, and sellers of Indianapolis’s multicultural and ‘global’ city status. However, this strategy of utilizing diversity as an economic development tool creates an idealized immigrant subject; immigrants from nations with strong global economic positions are idealized and immigrants from other nations are not included in this framework. This research is of particular importance in understanding the ways in which diversity is constructed as an asset for communities, and the limitations of development oriented planning in addressing a diversifying population in cities.

References

There are many uncertainties in the future for planning, climate change being a major one, but two trends that are absolutely going to continue are urbanization, and migration. In Oceania, these trends converge and lead to complex questions about how places change and how people are accommodated and adapt to more urbanized environments.

While the majority of climate change research is not focused on the Pacific, there is consensus that islands in Oceania will be among the most vulnerable to the effects of climate change. The challenges of climate change to policies around immigration are evident in Oceania and it is incumbent on nations like New Zealand and the United States to prepare for greater numbers of Pacific Island migrants (Barnett, 2003). Hawaii is a receiving community for migrants from Oceania, and most recently, the majority have been from Micronesia. Because the island nations that comprise Micronesia are mostly lower-elevation atolls, increased migration in the future is very likely. This research proposes that the policies around migration should not just be about who comes and how, but also the more nuanced dynamics of migrant communities in the receiving countries. For planners to be more aware of how migrants adapt is critical. Currently, concepts and designs for spaces and their uses within cities rest largely on professional assumptions about the spaces value in the social world. These assumptions are founded on culturally specific perspectives for way-finding and spatial models (Shore, 2014).

This research describes how Pacific women in diaspora create spaces for themselves and their families in a dense and diverse urban environment on Oahu while considering how migrants are formally planned for both in physical designs and through public policies. Using qualitative methods, a cohort of women who had recently migrated from Chuuk, Micronesia share their experiences in the city and the ways they navigate, use, and shape space. Located in the Kalihi-Palama neighborhood on the fringe of Honolulu, the community of diasporic women provided an opportunity to understand their acculturation of space and their social practices in the city. To understand the dynamics of the receiving community planning documents were analyzed and planners, organizational actors and policy makers were interviewed. These two strands of inquiry resulted in a more holistic view of the context and experience of migration in the urban environment on Oahu. Findings build a foundation for understanding of the processes of adaptation and the dynamics of how migrant communities root themselves. These insights allow planners to be more aware and inclusive of culturally patterned uses and perceptions of space, ultimately leading to greater equity, and support for migrants. Ultimately, this research suggests that a heightened awareness and responsiveness to migration is not just a moral imperative, but can result in larger gains for receiving communities.

References
EVALUATING STRATEGIES TO PROMOTE PARK USE IN LOW-INCOME MINORITY COMMUNITIES: IMPLICATIONS FOR ADDRESSING HEALTH INEQUITIES

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Individual Paper

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Parks and trails play a crucial role in the health of local populations by providing residents of all skill levels with opportunities to be physically active through free and low-cost activities. In addition, parks have also been found to benefit health by reducing stress and promoting a general sense of well-being. Their importance is further augmented in low-income minority communities where residents have limited means to access other leisure-time activity options. While studies on the subject have made significant progress in evaluating strategies that promote park use, they tend to focus on evaluating the strategies based on park-use and health outcomes of the general population. Little research has focused on evaluating the strategies’ potential and applicability to increase park use in communities of lower-income minority residents who are at a higher risk for poor health outcomes. Therefore, there is a pressing need to analyze the effectiveness of park-use promoting strategies in such communities.

Building on this research need and in an effort to address the region’s health inequities, researchers at the University of Minnesota in partnership with the Minneapolis Park and Recreation Board initiated the Survey of Parks, Leisure-Time Activities and Self-Reported Health (SPLASH) project. The project was aimed at evaluating the impacts of a 2-tiered intervention process, an environmental intervention and an informational intervention on the park use of residents in three low-income minority neighborhoods in Minneapolis, MN. The environmental intervention evaluated consists of physical park improvements at two parks including the opening of a new community center at one and infrastructural improvements at the other. The informational intervention includes the provision of better information to residents regarding outdoor recreation opportunities in their neighborhoods through newsletters and employing incentive programs to encourage respondents to visit parks and trails. To evaluate the interventions, data was collected at baseline (2010) and follow-up (2011) using a survey. Information collected through the survey included a detailed account of the respondent’s park visits in the past three days, perceived barriers to park use, and general park use characteristics. The baseline sample consisted of 568 respondents from the three target neighborhoods and the follow-up survey, for which residences of the baseline survey participants were revisited, consisted of 433 respondents.

Our paper aims to evaluate the effectiveness of these informational and environmental strategies to promote park-use in lower income minority-dominant communities. In order to reduce bias from unobservable confounding factors impacting park use and health, the analysis for this paper will employ a before-after design with controlled groups for evaluating the interventions.

While this research is on-going and will involve rigorous empirical analysis, we conducted some preliminary tests for before-after changes in park use and perceptions using the Wilcoxon signed-rank test. Results from the environmental intervention analysis showed an increase in the past three-day park visitation in the intervention neighborhood that received infrastructural improvements (z = 2.96; p = 0.00) and a decrease in the intervention neighborhood with the new community center (z = -3.19; p = 0.00), compared to no change in the control neighborhood (z = 0.22; p = 0.82). For the informational intervention, the sample for the study was limited to respondents who had lived in the neighborhood for more than 1 year to ensure full exposure to the intervention (N=371). No significant changes were found when comparing before-after park use frequency in both the control and intervention groups. In contrast, the perception of lack of information about parks decreased in the intervention group (z = -1.72; p = 0.09) compared to no change in the control group (z = -1.45; p = 0.15).
The emergence of community-engaged design practice is the result of a paradigm shift in design education and design practice “toward socially responsible, sustainable, humanitarian design” which seeks to work directly with the community members served by the design intervention (Smith 2007). Community-minded designers often quote Herbert Simon’s definition of design as “changing existing situations into preferred ones.” A new mode of design practice surfaced in recent decades by challenging what those preferred situations should be and who should have access to them (Bell and Wakeford 2008, Moore and Wilson 2013). This paper proposes that the next major question to address in these emerging practices might be who has the agency to affect that change? Community-engaged design (CED) emerged out of a call for the design professions to directly respond to the needs of underserved communities. But a recent survey illustrates that even self-identified community-engaged designers rarely do more than what Arnstein’s Ladder of Participation would deem degrees of tokenism to deeply engage community members in which they work (Arnstein 1969, Blake 2010).

After this survey of practitioners, focus groups, and a scan of organizations across the country, Hester Street Collaborative’s work on the Queensway emerged as one of the best practice approaches to community engaged design and planning. The Queensway project was a feasibility study to transform an abandoned railroad in Queens into a greenway. Hester Street conducted outreach for dlandstudio and wxy architecture as they developed concepts. Hester Street conducted a series of visioning workshops, and also developed a mobile outreach toolkit complete with a series of game-like experiences meant to allow people to give feedback in a fun and casual environment. This mobile toolkit created another venue, rather than the formal public meeting that can be so stale, for nonprofit partners, school children, and community members to learn and engage with project concepts.

The central aim of this paper is to help elevate the rigor of engagement and evaluation methods in community engaged design to ensure more equitable and environmentally sound outcomes. The paper will first review the state of the field based on an online survey and associated focus groups with practitioners, and then deeply dive into one exemplary case study to understand the manner in which innovative engagement methods are crafted, employed, and received by underserved communities. Care will be taken to understand the level and modes of integration the data collected through these methods is then incorporated into final designs, as well as to understand the evaluation metrics used to gauge the equity and sustainability impacts of the project as designed. Research will be conducted primarily through semi-structured interviews with designers, partners, and clients for the project. Online surveys will also be deployed to gather information from more public constituents when appropriate. And finally, content analysis of the meeting notes and plans drafted will be conducted as available.
This paper hopes to contribute to the discourse in planning education and practice on the available methods of engagement and evaluation in community engaged design.

References


Abstract Index #: 182

HOW ILLEGAL OUTDOOR COMMERCE REVIVES DECLINING STREET SPACE: AN EMPIRICAL STUDY ON MOBILE FOOD VENDORS’ BEHAVIOR ON NIGHT-STREET OPPOSED BY CITY ADMINISTRATION

Abstract System ID#: 1042

Individual Paper

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Introduction: we make the empirical study by long-standing observation upon mobile food vendors’ behavior on night-street beside our campus. The street crowded with high-rise buildings falls into the dilemma: most of restaurants and coffees with street frontage continue to retreat. The reason is that the high house rent causes the high selling price, which can attract neither white collars nor students in daytime. While white collars leave and shops close in the evening, the street is lost in the deathly dark and still, with few pedestrians. But some food vendors emerge at night, aiming at the campus students’ appetite. They locate on street sides or corners, cooking and selling diverse food by simple pots and gas stoves settled on tricycles. Because of the diversity and nice price, more and more students gather and hang around the night-street, enjoying delicious food. Some attracted pedestrians also change their formal routines to join this grand fest. Therefore the street is filled with various people, food, light, odor and noises, and so becomes vivacious consequently. No doubt the outdoor commerce has some shortcomings on food sanitation and devotes no tax or rent, so is forbidden by commerce and hygiene administration and inspected by police patrol, but the vendors have their own sentries who observe the emergence of policemen, before which they are able to retreat quickly. When they disappear, the street returns again to the dark and still dramatically. After a long-term “cat and mouse game”, both vendors and policemen fulfill an informal coordination, as the power of police patrol is not overwhelming and the vendors indeed help guard the street safety to an evidential extent.

Framework: the contradiction between shop decline in daytime and vendor rise at night indicates the thinking of William Whyte: what is the essence of space and who is the lord of space? According to his theory and attitude, space serves people as it provides place for human behavior, which endow space the vitality and durability in return. Both the void space without people coming and the temporal space without people staying are useless. Then we raise the hypothesis: the essence of space lies in the crowd of people who gather, wander and hold durable activities. They also attract other merchants, who make use of such high human density to raise the chance of deals. Shops are initiated afterwards because of the durability, and the house rent rises accordingly. The government can also levy a tax on shop owners and landlords, even losing a little from vendors. In this sense, the real lord of space is the street vendor who leads original attractions and ignites the passion of crowd, not the landlord. Vendors create and maintain apparently space value, which is embodied by house rent. If they leave and no other attractions substitute, the space declines. We also underline that such originality is not planned directly by the government or developers, while it achieves the objective of planning indirectly.
Methods: we process this empirical study by behavior tracing, activity observation, individual interview and quantitative statistics. A genius vendor who sells crepe and attracts the most guests is paid more attention. He stayed at street corner with highest human density, where is also the ambiguous border of different administration districts, so he could alter his location easily according to the policemen’s sources. After gaining immovable celebrity, he rents a small house and runs a crepe shop. Other vendors and shops also settle around his shop to free ride his trademark. The story from vendor to shop owner indicates precisely how his illegal business vibrates the process of space revival.

References

Abstract Index #: 183
TOWARD A THEORY OF INTERCULTURAL PLACES AND PLACEMAKING: BRAZILIAN ETHNIC RESTAURANTS IN Tōkyō JAPAN
Abstract System ID#: 1101
Individual Paper
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Intercultural places and placemaking develops a theory of intercultural placemaking through the study of Brazilian restaurants in Tōkyō, Japan. How and under what conditions can urban places, like ethnic restaurants, serve as vehicles for intercultural interaction, learning and engagement? And more specifically, in what ways do Brazilian restaurants serve as places of intercultural exchange and understanding between Japanese and Brazilians in Tōkyō? are the main research questions that drove this exploratory research to examine the role of actually existing places in today's living with cultural diversity in Tōkyō, Japan, a country unused to think of itself as multicultural.

I used Brazilian ethnic restaurants to think about the place –literal and metaphorical- of the Brazilian presence in contemporary Tōkyō. The attention paid to the Brazilian presence is justified by it being the third largest group of foreigners living in Japan since the early 1990s, a consequence of a special visa that created the Nikkei category for Brazilians of Japanese ancestry to work and reside in Japan. It is a case that exemplifies Japan’s need of foreign workers and yet its inability to fully embrace them as members of society. Thus, studying and documenting the dissemination of knowledge about Brazil and its culture in these sites is compelling given the limited latitude of expression that Brazilians (Nikkei or not) have in the Japanese political and ideological-normative realms.

By employing the notion of micropublics (Amin, 2002), a prime site for reconciling and overcoming the tensions that may be associated with difference through everyday urban, daily and local negotiations, I focused on the everyday urban, daily routines and local negotiations that bring Japanese and Brazilians to Brazilian restaurants. I designed this research taking a grounded theory approach using comparative case study as a qualitative method, and looked at the processes of placemaking – the processes that lead to the making of tangible places as well as social spaces- to examine the terms of engagements between Japanese and Brazilian within those places.

The research findings reveal how individual characteristics, motivation, and path leading to the making of a Brazilian ethnic restaurant and its actual setting affect the ways the place can be experienced, while concurrently interacting with the type of intercultural experience it fosters. By examining the setting of a restaurant, this study
identifies the programmatic, aesthetic, and interactive qualities that lend to greater or lesser intercultural exchange. This study reveals the different types and levels of intercultural relations, from simple co-existence to deeper engagement and exchange.

References


Abstract Index #: 184

WHO BELONGS IN THE NEIGHBORHOOD? NEGOTIATING SOCIAL INCLUSION AND A SENSE OF BELONGING IN PLANNING FOR URBAN SOCIAL SUSTAINABILITY

Planning for sustainable communities involves various decisions that affect environmental, economic and social systems. Scholars continue to debate theoretical definitions and actions relevant to the social dimension of sustainability (Vallance, Perkins, and Dixon, 2011). Meanwhile, many neighborhood-scale sustainability planning projects are attempting to negotiate the inherently subjective nature of theoretical concepts that define socially sustainable communities, such as social inclusion and nurturing a sense of belonging (Colantonio & Dixon, 2009). While these may represent the theoretical ideal, the reality of working toward these goals in urban communities is complex and fraught with contradictions, particularly with regard to inclusion of sexually oriented businesses and representation of immigrants and other marginalized groups. This study explores three case studies of neighborhood-scale sustainability planning projects in Portland, Oregon, U.S.; Copenhagen, Denmark; and Nagoya, Japan to describe how these communities are grappling with the challenges of planning for social sustainability. This analysis seeks primarily to answer the question: Whose interests are being emphasized and whose interests are being overlooked throughout the planning process? Each community is confronting challenges that further blur the lines of what it means to cultivate social sustainability. Emergent themes include negotiating contested land uses, integration of the disenfranchised, and marginalization of the marginalized.

Notions of social sustainability are complicated by active inclusion or exclusion of the truly marginalized. Resistance, regulation, and exclusion of sexually oriented businesses are components of the social production of space (Papayanis, 2000) that reinforce a heteronormative moral geography (Hubbard, et al., 2013). However, communities are forced to weigh social inclusivity over concerns of nuisance and negative externalities of sexually oriented businesses. Communities also find challenges associated with the nuanced needs of immigrants that go beyond translation, interpretation, and culturally relevant outreach. Questions arise over who should be included, who should feel that they belong and to what lengths community leaders should go to achieve these ideals. In essence, social sustainability for whom? At what expense? While the field of planning has long debated locally unwanted land uses (LULLUs) (Popper, 1981), representation among immigrant groups, the right to the city, and NIMBYism, these notions are considered in this new context of unraveling what it means to plan for urban social sustainability.

References

SENSE OF PLACE IN DOUGLAS PARK: EXPLORING RELATIONSHIPS BETWEEN PUBLIC LIFE, PLACE RELATIONS, AND THE POLITICS OF PLACE IN AN URBAN PARK

Abstract Index #: 185

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This project explores a sense of place in Douglas Park, Columbia, MO as it relates to the African American community that uses it. Douglas Park is a neighborhood park in Columbia MO. It is situated in Columbia’s highest density of low-income and minority residents (U.S. Census Bureau, 2010). The neighborhood is tightly knit but impoverished, a legacy of Columbia’s segregation and urban renewal program that leveled a once-flourishing, though poor, African American community and replaced it with a state highway, commercial development, and housing projects.

The term ‘sense of place’ for this study considers theories and methods taken from the Environment and Behavior and Urban Design fields namely: Public life, Place relations, and the Politics of place. Theories on the sense of place have made critical contributions to our understanding of our relationships to place. For the most part, these theories have followed two separate domains. The first, largely followed by the urban design field, analyzes the social dimensions of public life in urban public spaces such as parks, plazas and pedestrian friendly streets. Examples include observing and analyzing the ways in which people stand, sit, walk, people watch, socialize and engage in recreational activities amidst the physical design of these urban public spaces.

The second domain on the sense of place, largely followed by the environment and behavior and cultural geography fields, articulates the roles and meanings places have in our lives. Here, research has tended to focus on the perceptual dimensions of our relationships to various places, in particular our affective personal ties to various places and the meanings we derive from them. Empirical research has mostly taken place in residential settings, with a few focusing on the public domain.

Very few studies have attempted an interdisciplinary approach that bridges together both the social and perceptual dimensions of a sense of place. Those that have, tend to concentrate on one domain, while arbitrarily looking at the other. These biases to either one domain leave out significant questions concerning the interplay of affective ties and meanings towards certain public spaces and the various social behaviors within those spaces. This is especially important for those public spaces that are considered ideologically important towards certain communities.

In addition, in both the social and perceptual domains, very few studies have looked into spaces that are important to African American neighborhoods and communities. The few that have, are in the perceptual category and have focused either on residential settings or on religious spaces, but have avoided public spaces. This lack of attention towards important public spaces to African American neighborhoods is unfortunate. The years after the abolishment of Jim Crow laws, were ones that finally allowed African Americans to exist in the public domain without random harassment and unchallenged violence. These gained freedoms within public spaces may have steered African Americans to perceive certain public spaces within their neighborhoods as emotionally laden spaces with symbolic value. These values could be embedded in the daily uses, scenes and actions within these spaces.
Due to these shortcomings, the proposed project becomes important. Douglas Park has long been considered as a central public space, both socially and ideologically to several African American residents in Columbia. A holistic study that evaluates and interprets the social behaviors within the park, and the affective ties and meanings it holds to its users, can contribute theoretically, methodologically and substantively to the sense of place research field. It can help weave together complex and intangible phenomena often associated with the perceptual dimension, with the more measurable social dimensions associated with the field. In doing so, it hopes to bring Douglas Park to life as a spatial expression of public life, culture and politics.

Abstract Index #: 186
PLANNING AS TRANSLATION: COMMUNITY PLANNING FOR UNDOCUMENTED LATINO IMMIGRANTS IN SAN JOSE, CALIFORNIA
Abstract System ID#: 1255
Individual Paper

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This analysis examines techniques for community planning in the context of unauthorized immigration to consider how planners can forge substantive collaborations with undocumented immigrants. By providing a case study that chronicles planning studios in San Jose, California, I evaluate deliberative planning practices in undergraduate and masters level instructional settings to consider principles and techniques that embrace planning as a process of civic engagement and capacity building led by undocumented Latino immigrants. I argue that this process upholds urban planning as an act of translation; a process in which the meaning of planning principles is not only communicated between planners and non-planners, but also an approach in which social learning equips planning techniques with advocacy and leadership qualities. Planning as translation re-visits central questions concerning power and the ethics of deliberative planning by introducing legal citizenship as an unresolved tension that calls for the adoption of planning techniques by undocumented immigrants to generate collective agency and political empowerment.

In the first part of this case I summarize the literature on deliberative planning to address key gaps concerning the inclusion undocumented immigrants in planning processes. Planning is exemplified by a normative conception of the public interest that portrays the resident as a figure with full citizenship rights: someone who can fully participate, vote, understand compete and disagree with planning goals and objectives. Nevertheless, non-citizens can’t adopt this identity, besides cultural barriers and language limitations that may arise, essentially they don’t hold the substantive rights that allow them to stake legal claims for and against planning objectives. Similarly, the un-authorized condition of undocumented immigrants forces them to constantly negotiate their visibility in public life, disrupting short term and long term participation in deliberative planning processes. I consider these exceptions in relation to the model of collaborative rationality (Innes & Booher 2010) and its application within a neighborhood context defined by the demographic majority of undocumented immigrants.

I continue this analysis by providing the background of the studios that I taught at San Jose to consider the successes and limitations of planning for translation. I examine a number of key principles that were used to define community engagement with undocumented immigrants through planning themes and suggest a number of techniques – policy analysis and education, cognitive mapping as social learning, generative reviews, popular education techniques, and inquiry by design approaches – that point towards civic engagement and capacity building when applied in an undocumented immigrant setting. I explore the outcomes of these techniques as well as their limitations within the institutional arrangements that defined studio pedagogy and the political context of the neighborhood.

References
- Planning with complexity (Innes & Booher 2010)
- The deliberative practitioner (Forester 1999)
- Pedagogy of the oppressed (Freire 1970)
A CLOSER LOOK AT DIVERSITY: NON-BLACK STUDENTS ENROLLED IN PLANNING PROGRAMS AT HISTORICALLY BLACK COLLEGES AND UNIVERSITIES

Abstract Index #: 187

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The number of non-Black and Hispanic students of any race enrolled in planning programs at Historically Black Colleges and Universities (HBCUs) may be characterized as dismal (Association of Collegiate Schools of Planning [ACSP], 2014). This is a topic worthy of the discussion, diversity in planning education. Some scholars (Thomas, 2012) have long emphasized the need for planning schools to explore ways to respond effectively to issues surrounding equity, inclusiveness and diversity. However, planning literature indicates a dearth of information regarding non-Black and Hispanic student enrollment in HBCU planning programs. Multicultural competence is important for planners as the nation becomes more culturally diverse (Sandercock, 2003). HBCUs offer non-Black and Hispanic planning students unique opportunities to expand ideas about diversity and increase cultural awareness.

Our research captures the experiences of non-Black and Hispanic students enrolled in graduate planning programs at five HBCUs. We define non-Black as students who self identify racially as other than Black and those who self identify ethnically as Hispanic of any race. We do not include in our study participants in overlapping racial and ethnic categories. The research poses four principle questions: (1) Why do non-Black and Hispanic students of any race choose to pursue graduate degrees in planning at an HBCU? (2) What HBCU experiences do these students consider most beneficial in preparing them for employment after graduation? (3) What unique challenges do they encounter? (4) How likely are these students to encourage other non-Black and Hispanic students to attend an HBCU planning program? Additional questions are subsumed under the four primary questions.

We use a mixed method approach that combines qualitative and quantitative data collected from primary and secondary sources. Through a series of personal interviews and a questionnaire, participants share their experiences as students enrolled in HBCU planning programs. The questionnaire consists of open-ended questions to allow for quantification of responses followed by open-ended questions to obtain more detailed, qualitative data. Secondary sources draw from existing literature relative to White, other non-Black and Hispanic students attending HBCUs.

The research illuminates the experiences of non-Black and Hispanic students enrolled in planning programs at HBCUs. Simultaneously, the work foregrounds an understudied topic and adds a new dimension to the diversity conversation taking place in planning education. Finally the research speaks to the critical role played by HBCUs in educating the next generation of planners.

References
Since the 1960s, scholars from different intellectual backgrounds have made eloquent pleas for an urban strategy that promotes physical and social diversity (Jacobs 1961; Florida 2002; Young 1990; Sandercock 1997, 2003). Underlying the appeal of city life, diversity has become the new orthodoxy of city planning (Fainstein 2005). While it has the potential to evoke greater understanding and stimulate creativity, exposure to “the other” can intensify anxieties if different socioeconomic groups perceive the lifestyles of each other as irreconcilable (Harvey 1992; Sennett 1971). The dilemma of diversity in public policy is particularly salient in North American cities where immigration contributes to various kinds of socioeconomic diversity.

In light of the theoretical debate on the value of diversity, I use various groups of Mainland Chinese in Vancouver, Canada as a case study to discuss the limits of diversity as a normative ideal in city planning. In the City of Vancouver, Chinese is the largest ethnic group among all ethnicities including those of English and Scottish origins (Vancouver Foundation 2010). The perceived wealth of some individuals has made this ethnic group the easy suspects embroiled in a protracted housing debate in Vancouver, one that pitted Chinese immigrants as foreign investors against local white Vancouverites. Consequently, anxieties and fear in the realm of housing and real estate development challenge the official claims for cultural diversity and tolerance of difference. Without lumping together groups from various localities in Mainland China, I examine specific urban processes in three Chinese cities – Beijing, Shanghai and Zhongshan – that generate differences among Mainland Chinese groups prior to their arrivals in Vancouver. I argue that the promotion of diversity needs to be contextualized within meaningful discussion on the economic structure and global division of labour that shape and reshape group differences.

This paper represents some of the findings from my doctoral dissertation based on 73 in-depth interviews, non-participant observations, field-trips to Beijing, Shanghai and Zhongshan, as well as analyses of primary and secondary sources of materials in both Chinese and English.

My findings contribute to a growing body of research that explores relationships among immigration, diversity and city planning. Rather than simply acknowledging the multiple kinds of diversification affecting ethnicities and identities, languages, social classes, skills and more that arise from immigration, I found it important to integrate knowledge of processes and mechanisms beyond the geographical space of migrant-receiving cities. As cities are increasingly linked with each other through global migration, my research offers significant insight into urban strategies to cope with the increased settlement of different social groups.

References

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In a context of variegated immigration impacts and economic and political landscapes, studies that examine the immigration policies at the local level as well as the factors and rationales underlying local governments’ policy adoption are much needed. We approach this issue from the lens of a local government policy on planning for immigrant integration: Welcoming America and its participating welcoming communities. Welcoming America is a grass-root organization that aims at promoting a welcoming, immigrant-friendly environment to immigrants through convening a community of U.S. cities to share their resolutions, strategies and policies in supporting long-term immigrant integration and fostering more vibrant and inclusive local communities. It departs from previous federal, state, and local government immigration policies through its component on economic development and job creation role of skilled immigrant workers and entrepreneurs. Thirty one cities and counties have participated in this initiative and term themselves as “welcoming city” or “welcoming county”. The participating cities and counties vary substantially in their historical role in immigrant reception, geographic location, immigrant share, economic size, demographic compositions, and political environment. The wide variation enables us to examine the differential weight of these factors in the immigration planning and policy making at the local level.

We will provide a comprehensive survey of the characteristics of these participating welcoming cities and counties, especially focusing on their immigration populations, economic status, and political settings. We will also generate a typology of specific immigrant-related initiative and policies adopted by these welcoming cities and counties, especially those focused on economic development. We will then conduct an empirical analysis on the factors influence the political diffusion and learning process of these local communities and their potential impact over time. This research will generate timely policy insight on planning for diverse population and economic growth at the local level.

Track 5: Housing and Community Development

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Although group power and influence is one of the most investigated aspects of interest group activity (Thomas, 2004), the work is highly lacking when it comes to defining an explanation of what leads to influence (Baumgartner & Leech, 1998). The lack of conclusive results that could generate a general theory of group influence on the political system is partly attributed to the dynamic process of policy-making. The policy-making process involves many variables, thus makes it difficult to identify all of them in each situation (Thomas, 2004; Baumgartner & Leech, 1998; Peterson, 1992).

The questions this work seeks to answer are the following: What are the strategies/tactics used by AOs to influence city affordable housing policymaking? Why do advocacy organizations (AOs) favor some actions over others when influencing affordable housing decision-makers? and How and when are AOs’ strategies effective in procuring support for affordable housing? To answer these questions I conducted case studies in four cities in Los...
Angeles County. I collected data through in-depth interviews with key stakeholders in the low-income housing policy process (AO leaders and city officials), a review of financial records for the AOs from the Urban Institute’s National Center for Charitable Statistics, and a content analysis of each city’s Housing Element. I triangulated interview responses from AO leaders and city officials with data gathered through document review of AO materials and the content analysis of each city’s housing plan. The combination of data sources and methods enhanced the validity and reliability of the results generated by this portion of the research. The city is the unit of analysis for the case studies, while the AOs in each city provided illustrative scenarios as embedded units. These embedded units helped focus the inquiry of the case studies (Yin, 2009; Carroll and Johnson, 1990).

This research draws from urban politics and social movement theories to frame the investigation and analysis. The political opportunities and resources the organization determine the strategies an AO will employ to influence policy. Political opportunity theory asserts that in selecting a strategy, an AO considers the degree of political freedom it has to express the group’s dissatisfaction with the status quo. This freedom ranges from free press and free speech (Gamson, 2009) to the degree of openness or accessibility of the political system to collectivities’ demands (Snow and Soule, 2010). This theory considers the interplay between the political system, sociopolitical conditions, and the way AOs interpret the situation in selecting their strategic actions. Resource mobilization theory, on the other hand, claims the emergence and persistence of mobilization and choice of strategic actions, depends on the resources available to the AO. This theory attempts to move the analysis away from the social psychology of its participants and provides a more objective way of understanding AOs’ choice of tactics (McCarthy and Zald, 2002).

The contribution to planning literature is the synthesis of urban politics and social movement theories to offer a more robust understanding of urban governance around the development of local community housing plans and the implementation of affordable housing policies. Theoretically, this work will provide a more nuanced understanding of city housing planning and policy-making, including the role of AOs in civic participation. This work supports Planning and community development practice by identifying and assessing AOs’ strategies and their effectiveness in achieving preferred policy outcomes.

References
Recession, housing market resilience has been a critical interest to planners, economists, and geographers in the U.S. One of questions raised has been why some neighborhoods have been more affected by the financial crisis, while others have not.

Resilience can involve much broader and multi-faceted issues, and studies on housing market resilience are scarce. Most planning scholars interested in resilience have focused on labor market resilience to economic shocks (Chapple and Lester, 2010) and housing market resilience to natural hazard disasters (Zhang & Peacock, 2010). However, few studies have examined housing market resilience to economic shocks. For example, Immergluck (2014) recently showed that racial diversity by recent immigrants contribute to neighborhood housing market recovery and resilience.

Given this research gap, the purpose of the study is to examine neighborhood resilience in the context of different metropolitan housing markets in the U.S. from 2000 to 2014, particularly focusing on the effects of location affordability taking both housing and transportation costs into account. Location affordability may contribute to neighborhood housing resilience.

This study uses multivariate analysis to examine the impacts of location affordability on neighborhood housing resilience during and after the U.S. housing crisis. The housing resilience indicator used as the dependent variables to measure the performance of housing markets is home value. The key independent variable is the location affordability, while controlling variables include housing and mortgage market characteristics, socio-economic and demographic characteristics, industrial structure, infrastructure, and others.

Considering the contribution of the housing sector to the national economy, the study on housing market resilience to economic recession is important for policy makers and planners to establish planning goals and strategies for a sustainable healthy housing market. Furthermore, understanding neighborhood resilience in the context of metropolitan housing markets will provide federal, state, and local governments with policy implications for helping neighborhoods not only to be more resilient, but also to prevent a downturn of communities during the next possible economic recession.

References

Abstract Index #: 192
DUBAI'S LOW-INCOME RESIDENTS BEING PUSHED TO THE BRINK: OLD NEIGHBORHOODS, MEMORIES, AND HUMAN EMOTIONS BROUGHT TO RUBBLE
Abstract System ID#: 15
Individual Paper
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Dubai appears frequently in cities and urban studies literature, which typically focus on either its glamorous and monumental approach to planning or its poorly regulated growth. The year 2008 represented a shift in Dubai’s development history. The city systematically transformed its development practices from the optimization of
vacant land to the removal of traditional and publicly occupied land. This study tells the story of the transformation, partial demise, and unclear fate of a Dubai neighborhood. Al-Satwa, a traditionally designed neighborhood, demonstrates a kind of urban violence that is under-theorized in urban studies literature: the disruption caused by top-down redevelopment. This article describes two kinds of violence that have characterized redevelopment efforts in Al-Satwa: displacement of residents and destruction of cultural fabrics. The article draws on several kinds of government and historical documents, field observation, and interviews with Al-Satwa residents. Findings reveal that Dubai’s post-2008 planning acts purposefully destroyed many traditional neighborhoods in order to expand Dubai’s culture of excess and superlative architecture. I show how these actions affect the living conditions of Al-Satwa’s low-income workers, who are strongly attached to their modest environment.

Al-Satwa, one of Dubai’s oldest urban neighborhoods, is located in a prime location, contiguous to the new downtown area. From the late 1960s to the early 1990s, it housed the indigenous population. In the mid-1990s, the migration of local families to suburban areas enabled the working class to take control of the area, and the most recent figures indicate that this district houses around 39,488 low-income workers. In 2007, the entire area was allocated to a semi-government firm for the purpose of transforming it into a luxury district. The firm compensated local owners and started the process of demolition. In 2008, after razing a huge tract of Al-Satwa, the firm halted the project due to the recession.

This study tells the story of an interrupted demolition-and-redevelopment project that has prioritized serving the economic elite to the exclusion of other values, such as historical preservation and serving a diverse population. The article offers an evidence-based theoretical contribution to the concept of urban violence. Specifically, the case of Al-Satwa demonstrates that urban violence is not just overt physical conflict between members of the population. Instead, urban violence can also include top-down projects that upset the lives of residents. In this paper, I ask: How can the case of Al-Satwa contribute to scholarly conceptualizations of urban violence?

This research reflects how Dubai’s core areas are controlled by public-private business leaders and demonstrates how top down planning thoughts and actions, when they merely favor high-end people and fast investment return, can be a form of urban violence with a traumatic effect on low-income individuals. Participants in this study expressed a strong sense of belonging to the neighborhood, satisfaction with the neighborhood and their homes, and appreciation of the local environment. Scholars argue that these factors are core indicators of social stability. Going much further back, the Greek philosopher Plato said that the ideal city must mitigate against exploitation and must provide shelter, protection, and most importantly happiness to its residents. For this reason, I argue that Dubai is enacting a type of urban violence by knocking down Al-Satwa to expand the city’s commercial realty and high-end lifestyle facilities. The dimensions of this violence include eliminating physical areas that carry strong emotional memories, demolishing the old city fabric to benefit business interests, displacing residents and employees, depriving Dubai of a unique and vigorous place, disregarding traditional lifestyles and urban fabrics, and disrupting residents’ sense of satisfaction and security by creating confusion about the neighborhood’s future.

References
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This paper brings community development, third sector, and poverty literatures together to ask how variations in nonprofit organization and funding systems affect anti-poverty measures. While planning scholars have observed the functions, shortcomings, and political orientations of Community Development Corporations (CDCs) and other forms of nonprofit and grassroots organization (Stoecker, 1997; Vidal, 1996), the role of anti-poverty funding schemes on these organizations merits more grounded evaluation. As nonprofit funders attempt to stretch each donated dollar, the historic debates between person-centered and placed-based approaches to poverty reduction are resurfacing in nonprofit service delivery. This research examines these issues within Rio Grande Valley (“Valley”) colonias in Texas. The Valley is one of the most impoverished regions in the United States, with a poverty rate of nearly 38 percent. Its two major cities (McAllen and Brownsville) are consistently ranked as the poorest cities in the United States. Across this region, the poorest neighborhoods—the “colonias”—still live without adequate housing or access to basic services, like water, electricity, and waste management, among others (Ward, 1999). In lieu of public planners, the colonias of the Valley have cultivated a strong system of grassroots and nonprofit organizations (Donelson, 2004) that dates back to Cesar Chavez’s farmworker movement of the late 1970s.

Based on a qualitative case study of Valley nonprofits, I comparatively analyze the complex networks connecting funders to colonias organizations to residents. I select organizations and funders based on locational and programmatic criteria for inclusion in a series of semi-structured interviews and an organizational survey. Additionally, focus groups with colonias residents test the impacts of nonprofit programs by crosschecking the veracity of organizational responses. From this, I evaluate each program in terms of the theories of poverty influencing its funding structures. Most notably, there exist hybrid person/place funding schemes, programs, and cross-organizational collaborations that leverage the strengths and weaknesses of each approach (Spencer, 2004). Ultimately, this paper contributes to research on housing and community development organizations, specifically regarding U.S. colonias, and the potential influences of various anti-poverty funding schemes on nonprofit planning attempts in our poorest communities.

References
The relationship between poor housing and public health has been well documented since at least the industrial revolution. Housing impacts health in two ways. The first is the physical unit itself that is designed to “address basic human needs for shelter and security by providing protection against climatic conditions (excessive heat and cold) and unwanted intrusions from insects, rodents and environmental nuisances, such as noise that may be harmful for health and well-being” and the other is the “capacity to nurture and sustain social and psychological processes” (Lawrence 2010, 145). Gibson et al (2011) similarly identified three pathways linking housing and health: i) area characteristics (for example, crime rates and access to amenities), ii) internal housing conditions (particularly cold and damp conditions, and lead poisoning), and iii) housing tenure (owner versus renter status).

In other studies, Julien et al. (2008) found higher incidence of migraine and headaches among families living in poor quality housing, and Ambrose (2001) found a 7-fold decrease in the health costs to low income families in the United Kingdom after their housing was substantially rehabilitated.

The body of evidence shows that the following are measurable indicators of the relationship between housing and health:

- Illnesses related to physical and chemical exposures in the housing unit such as lead and radon (Sandel et al. 2010; Krieger 2010);
- Illnesses related to biological exposures in the housing unit e.g. mold, dust mites and cockroaches (Chew et al. 2006);
- Adverse impacts of substandard housing on residents’ mental health such as anxiety and depression (Blackman et al. 2001; Halpern 1995);
- Psychological impacts related to improved housing (Gibson et al. 2011; Kearns et al. 2000; Dunn 2002); and
- Physical characteristics of the housing unit that contribute to improved health such as design, indoor air quality, overcrowding, etc. (Northridge et al. 2010; Hood 2005).

This study reports on the health outcomes of improved housing on Habitat for Humanity, Indiana home owners. Using a mailed survey the study sought self-reported responses from home owners on the before and after effects of home ownership on their health, documenting neighborhood and housing effects as well as impacts on the physical and psychological health and self-esteem of home owners.

In a review of 13 articles by Acevedo-Garcia et al. (2004) on five housing mobility programs, the authors concluded that while housing mobility holds the potential to improve the health of households they lamented the sparse literature on the subject and the absence of methodologically sound procedures in the published literature. This paper adds to the volume of literature on housing mobility and health and adopts a rigorous logistic regression methodology to the analysis of the data. The findings show a strong and significant relationship in health outcomes for low income households following housing improvements.

Abstract Index #: 195
HIPPETOWNS
Abstract System ID#: 42
Individual Paper
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Hippietowns are alive and well and exist all over the world. Hippietowns are communities with local governments that have an active “hippie” agenda and use public funds to achieve these goals. The term "hippie" is a popular media catchphrase to describe people during the 1960s who shared a series of “countercultural values” that emphasized freedom, peace, love, and a respect for others and the earth” (Stone, 2000, p. 13, Wolfe, 1968, p. 11). Hippietowns can be understood as a community of individuals who “have structured society according to their interest and values” (Castells, 1986, p. 303). These countercultural values have been translated to real planning guidelines that affect the day-to-day policy making in these communities. Similar to Pierre Clavel’s
"progressive cities" (1986, p.9) where people with a “progressive stance” took over mayoral offices and city councils to advance their agenda, Hippietowns governmental guidelines can be understood as being at the middle of the three-way policy intersection of: progressive governance, organic economics, and environmental stewardship. It is the unique combination of working outside of the norms of “mainstream” society and planning for achieving progressive social and environmental goals which I focus on in hippietowns.

Hippietowns are not communes. Communes are “at least five adults plus two children living together and self-identified in quasi-kinship terms“ (Bennett, 198, p.6) out on the extreme rural fringe (e.g. The Farm, in Tennessee). Hippietowns are real places actively seeking “an orderly revolution of positive change” and can be seen in Bisbee, AZ, Arcata, CA, and Eureka Springs, AR (McCleary, 2002, p. 114). A good example of hippietown policy would be in Arcata, California which is the first U.S city in 2004 to ban the growth of any type of Genetically Modified Organism within the city limits (City of Arcata, Ordinance 1448).

This paper provides preliminary findings of an exploratory mixed method research project (Gaber and Gaber, 2007) into the world of hippietowns. It begins with defining hippietowns within the planning literature of Urban Villagers by Herbert Gans (1982); The City and Grassroots by Manuel Castells (1983); and, The Progressive City, by Pierre Clavel (1986). With this theoretical guide in hand, I then provide an overview of the hippietown case study investigation in Eureka Springs, Arkansas, USA. The intent of this paper is to learn from the outlying practices of hippietowns as part of a “best-practice” approach to better understand planning and local policy making.

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References

Abstract Index #: 196
IS HOMEOWNERSHIP THE ‘AMERICAN DREAM’ AMONG LOW-INCOME AFRICAN AMERICANS IN JACKSON, MISSISSIPPI?
Abstract System ID#: 47
Individual Paper

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The Housing Act of 1949 called for a “decent home and suitable living environment” for every American (Lang and Sohmer, 2000). Since this act, homeownership has been labeled as the “American Dream” due to opportunity, personal fulfillment, a financial safety net, and a secure retirement. In lieu of these benefits, why is there a gap between White Americans and African Americans in homeownership? Low-income status in the United States varies significantly by race. More than 13.4 million families are living on incomes less than 200% of the federal poverty level and 22% are African Americans. One government program that was deleterious and had a disproportionate impact on the African American community of central city neighborhoods was entitled Urban Renewal. It is estimated that Urban renewal displaced one million individuals from the time of its enactment in 1949 to 1965. The impact on African American communities was so disproportionate that the program earned
the nickname “Negro Removal” (Goetz, 2013). This program was displacing families and disrupting communities nationwide.

Housing is central to participation in the economic mainstream, but since the recession, this hasn’t been so. As the numbers for homeownership continue to decrease, it has made it harder for low-income African Americans to purchase a home. This research will investigate information regarding homeownership still being the “American Dream” and whether the dream is still prevalent among low-income African Americans. It will focus specifically on the population in the city of Jackson and the surrounding metropolitan area. Surveys and focus groups will be conducted to verify that homeownership among low-income African Americans can still be the “American Dream.”

References

Abstract Index #: 197
THE PARTNERING GOVERNMENT AND UTILIZATION OF LAND BANKS
Abstract System ID#: 52
Individual Paper
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Inspired by the successes of Michigan and Ohio, many U.S. states with depopulated great cities enacted state legislation to establish a land bank which copes with vacant properties. As the primary tax foreclosing entity, county governments play a key role in land banking. Many of the recently-established land banks are a county authority or a countywide public-mission nonprofit. Cities also often create land banks as an organization or a government program. Except for county-city consolidated municipalities, cities needs to collaborate with counties who handle tax foreclosures and tax auctions.

This paper discusses how to induce the potential of land banks according to their structure and partnering government. Land banks are classified into five types: county-established, city-established, jointly established by county and city, outer agency for a county (up here, all legislation-based), and non-legislative. Land banks, irrespective of types, need to actively engage in land use and community development. Realignment of land use is critical in a severely depopulated city. The venues of community development are usually low and moderate income neighborhoods where the issues of vacant and abandoned properties are prominent.

For county-established land banks, partnership with the core city is essential. Counties are more suitably positioned than cities to work on regional governance and metropolitan land use. On the other hand, city-established land banks are closer to local partners to repurpose unused properties in accordance with a city’s master plan and community development goals. City land banks frequently communicate with various city departments which are concerned with vacant properties. County-city-joint land banks are expected to combine the county’s strengths and city’s strengths. Agent-land banks retain broad discretion over property acquisitions and dispositions and over how they interact with for-profit and nonprofit developers and lenders. Non-legislative land banks and land bank programs may lack legal power, but nonetheless sometimes function well when they target neighborhoods that are relatively less deprived.

The performance of land banks is affected by various factors – legal, political, organizational as well as the local real estate market. Some factors are controllable for land banks while some others are uncontrollable, as they are contextual ones. We should be reminded that even contextual factors – for instance, the enactment of state
land bank law – may change in the future. Case studies for each land bank type will be conducted with a focus on how land banks work with the partnering government as well as other public actors and private businesses by dealing with controllable and uncontrollable factors in their activities.

References


Abstract Index #: 198
REVIVED NEARLY 50 YEARS LATER: THE CHALLENGES OF EXPANDING EMPLOYMENT OPPORTUNITIES FOR SECTION 3 RESIDENTS WITH CRIMINAL RECORDS
Abstract System ID#: 116
Individual Paper

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Section 3 was established in the Housing and Urban Development Act of 1968 to provide employment for public housing residents in distressed communities while rebuilding underserved neighborhoods. Today, Section 3 requires recipients of HUD funding to offer employment and economic opportunities to low-income residents and minority-owned businesses. The resurgence of Section 3, kindled by the American Reinvestment and Recovery Act of 2009, has encouraged HUD funding recipients to implement strategic procedures and programs to meet provision guidelines. As direct recipients of HUD funding, public housing authorities are not only finding new ways to comply with the minimum requirements, but are using the provision as a way to combat extreme poverty for their residents (Reckdahl, 2014).

Recipients of HUD funding that are required to meet the provision guidelines have identified a considerable number of barriers that prevent low-income residents with criminal records from securing employment. Ex-offenders are encouraged to participate in apprenticeship and job training programs but are often unable to obtain employment because of restrictive practices that limit opportunities. This is problematic as previous research has found that low-income ex-offenders unable to secure stable employment are more likely to recidivate (Visher, Debus, & Yahner, 2008) and gaining stable employment has been identified as a potential turning point that may foster desistance from crime (Laub & Sampson, 2001). Barriers to employment for Section 3 residents with criminal records are not an isolated phenomenon. Policy recommendations and research evaluating the issue are sparse even though the problem is prevalent in communities nationwide. With over $12 billion of applicable HUD Section 3 funding streams and more than 5,000 direct recipients of this funding, almost every community in America is faced with this challenge (Strengthening the Effectiveness of Section 3, 2009).

Section 3 has rarely been discussed in the literature and the challenge of expanding economic opportunity for arguably the most vulnerable Section 3 population, ex-offenders, has been ignored. This research is timely as HUD recently revived the nearly fifty year old Section 3 provision under the American Reinvestment and Recovery Act of 2009 and HUD recipients have been unequivocally implementing procedural measures to be in compliance with the provision. Furthermore, the U.S. Sentencing Commission’s vote over the summer of 2014 to reduce
sentencing for federal drug trafficking offenders is likely to grant thousands of prisoners an earlier return to their families and society by the end of 2015. These prisoners often return to distressed neighborhoods (Morenoff & Harding, 2011) and are likely eligible to register as a Section 3 resident. Developing effective solutions to expand employment opportunities for returning citizens is necessary for successful reentry.

Using San Antonio, Texas as a case study, a qualitative analysis is conducted to answer the following research questions: To what extent do existing practices create barriers to employment for Section 3 residents with criminal records? What are the underlying structural conditions that preserve these barriers? How can employment opportunities for Section 3 residents with criminal backgrounds be expanded? The current policy review and case study examines the extent to which policies may exclude otherwise eligible participants because of their criminal record. Fundamental challenges creating obstacles to employment are identified and discussed. Finally, a research agenda to better understand the impact of Section 3 and how economic opportunities can be expanded for low-income individuals with criminal records is proposed.

References


Abstract Index #: 199
DIFFERENT SHADERS OF CHANGE: THE RELATIONSHIP BETWEEN GENTRIFICATION TRENDS AND HISTORIC DISTRICTS IN LOS ANGELES.
Abstract System ID#: 122
Individual Paper

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The designation of historic districts is embraced by numerous localities as a tool in the management of neighborhood preservation, community economic development, and revitalization (Zahirovic-Herbert and Chatterjee 2012; Listokin et al. 1998; Rypkema 1994). However, criticism has arisen that designation can accelerate property values and rents, which can lead to gentrification and displacement (Zahirovic-Herbert and Chatterjee 2012; Smith 1998). Although there are assertions that community and economic benefits accompany historic district designation (Diaz et al. 2008; NYC Independent Budget Office 2003; Getty Conservancy 2001), they come from different socio-demographic and cultural contexts than Los Angeles. Up until now, no study has examined the impacts and socioeconomic changes that occur within Los Angeles’ historic districts subsequent to their designation.

This dissertation examined the effect of Historic Preservation Overlay Zones (HPOZs) on neighborhood change and gentrification in the city of Los Angeles. The work focused around three questions: (1) What physical, social, and economic changes can be attributed to historic designation? (2) Do HPOZ residents experience gentrification? (3) Has preservation been an agent of change or “no-change?”
Briefly, the theoretical literature shows that significant socioeconomic changes do occur in revitalized historic neighborhoods (Freeman 2006; Schill and Nathan 1983), however the relationship between historic designation and gentrification is inconclusive (Leimenstoll 1998; Gale 1991). Certain studies have observed that poor households in gentrifying neighborhoods are actually less likely to move than those in non-gentrifying neighborhoods (Freeman & Braconi 2004). Interestingly, in these studies, a number of gentrifying neighborhoods were designated historic districts, such as Harlem’s Clinton Hill. Other studies revealed that rather than spurring displacement, revitalization in certain historic neighborhoods has maintained economic and racial diversity (Rypkema 2004, Nyden 1998).

Finally, as Florida (2013) points out, L.A. does not conform to a typical urban-suburban pattern. Creative class pockets can be found throughout the city (near universities, the coast, or downtown), while the service and working classes tend to reside on the periphery of the major creative clusters. The HPOZs are spread throughout the city and fall into different class clusters with over half located in either service or working class areas. Thus, studying the impacts of HPOZs provides an interesting comparison and counterpoint to the current literature that mostly examines the effect of such districts and gentrification in strongly centered urban regions, like New York.

The paper employs a mixed-methods approach that combines a quantitative analysis of the socioeconomic characteristics of the HPOZs before and after designation along with five in-depth case studies. The socioeconomic characteristics of the 29 HPOZs are compared to city and county trends from 1970 to 2010 using principal component analysis. The three research stages include: 1) analysis of socioeconomic trends present before and after designation; 2) development of a typology of the different neighborhoods that are designated HPOZs; and 3) selection of case studies from different typologies.

The research is complete and the findings show: 1) the diversity of designated areas and 2) reveals how the benefits and disadvantages of historic designation differ by neighborhood. Although the case study neighborhoods ranged from low, middle, to upper income areas (Black, White, and Latino), they all experienced varying degrees of gentrification or ascension—from super-gentrification (Lees 2003) to an influx of urban pioneers into low-income communities (Mollenkopf 1983). Also, for Lower and Middle-Class areas preservation was seen (and used) as an agent of change, while in in wealthier areas preservation reinforced the status quo. This information helps planners identify policy areas for improvements, in particular the need for preservation to respond to diverse needs and to maintain mixed-income communities.

References


Abstract Index #: 200

FIGHTING FORECLOSURE: AN EXAMINATION OF THE EFFECTS OF A VACANCY ORDINANCE IN THE OLDER SUBURBS OF CLEVELAND

Abstract System ID#: 125
Individual Paper

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The concentration of foreclosures and large numbers of real estate owned properties (REO) has tremendous negative spillover effects on urban neighborhoods. For instance, foreclosed homes can reduce the sales price of nearby homes (Whitaker and Fitzpatrick, 2011) and those that are vacant for long periods of time increase public service costs for municipal governments (Agpar, Duda and Gorey, 2005). Recent work identifies the nature and extent of foreclosure in suburban communities, suggesting a strong relationship between foreclosure and suburban poverty (Schildt, Cytron, Kneebone, and Reid, 2013). As Schafran (2013, 665) notes in his examination of the geography of foreclosures in the San Francisco Bay area, “certain places are at the center of the [foreclosure crisis] for a reason.” In this paper, we suggest the story of foreclosure is also a contributing story about the slow decline of older suburbs, especially those outside cities such as Cleveland that experienced large scale economic restructuring in recent decades. Some local jurisdictions of older suburbs in Cleveland are fighting back by developing vacancy ordinances to ensure banks and others register vacant houses, keep properties well maintained, and prevent the selling of foreclosed properties in poor condition. For instance, in 2010, South Euclid, a struggling older suburb of Cleveland, introduced a vacancy ordinance with an escrow hold requiring purchasers of foreclosed homes to make any necessary repairs if violations of the local housing code were identified. Using spatial statistics, including spatial linear regression analysis, we find that such vacancy ordinances have helped stabilize property values and improve property conditions in older suburbs in Cleveland, particularly in the case of South Euclid. The findings from our paper also suggest that more needs to be done to help protect older suburbs from the negative impacts of the foreclosure crisis.

References

Abstract Index #: 201
HOW AFFORDABLE IS HUD AFFORDABLE HOUSING?
Individual Paper

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The United States Department of Housing and Urban Development (HUD)’s measure of housing affordability is the most widely used and the most conventional measure of housing affordability. According to the HUD measure, total housing costs at or below 30% of gross annual income are affordable. This is often considered as the definition of housing affordability and has shaped views of who has affordability problems, the severity of problems, and the extent of the problems. It is simple to compute and the raw data is easily available from a few recognized sources such as the U.S. Census Bureau, the American Housing Survey.

The HUD measure is also the legislative standard used to qualify applicants for housing assistance. It is used in the administration of rental housing subsidies, such as the Section 8 housing vouchers. Under these programs, participants can pay no less than 30 percent, and no more than 40 percent, of their adjusted income toward housing rent. We can assume, therefore, that housing costs alone are affordable for households participating in HUD rental assistance programs. But is the housing under HUD rental assistance programs still affordable when taking into account the transportation costs?

This paper assesses the affordability of HUD rental assistance properties from the standpoint of transportation costs. HUD housing is, by definition, affordable from the standpoint of housing costs due to limits on the amounts
Renters are required to pay. However, there are no such limitations on transportation costs, and common sense suggests that renters in remote locations may be forced to pay more than 15 percent of income, a nominal affordability standard, for transportation costs. Using household travel models estimated with data from 15 diverse regions around the U.S., we estimated and summed automobile capital costs, automobile operating costs, and transit fare costs for households at more than 18,000 HUD rental assistance properties. The mean percentage of income expended on transportation is 15 percent for households at the high end of the eligible income scale. However, in highly sprawling metropolitan areas, and in suburban areas of more compact metropolitan areas, much higher percentages of households exceed the 15 percent threshold. This suggests that locational characteristics of properties should be considered by HUD when establishing eligibility for rental assistance subsidies.

References

Abstract Index #: 202
FACTORS INFLUENCING URBAN REGENERATION: AN ANALYSIS OF CONVERSION OF NON-VACANT LAND USES TO VACANT
Abstract System ID#: 131
Individual Paper

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Neighborhood decline due to abandonment and vacancies is not only a problem in depopulating legacy cities in the United States, it is also an important issue facing many growing urban areas experiencing amplification of sprawl toward the urban fringe. Expanding cities which show population increases tend to report higher ratios of vacant land than legacy cities (Pagano and Bowman, 2004). Fort Worth, TX, is a representative growing urban area with elastic boundaries and increased population. Spatial analyses examining vacant land patterns in Fort Worth from 1990-2010 showed that the distribution of vacant parcels has shifted from being scattered along the periphery to being concentrated in the urban core. Once vacant parcels which were converted to non-vacant uses were located on the periphery while the opposite was occurring closer to the Central Business District (CBD). In addition, the average vacant parcel size tended to significantly decreasing over time. While civic expansion can result vacant land area increases, in the case of Fort Worth, population out-migrations and rapid peripheral development converted these vacant lands to active uses. The overall amount of vacant parcels increased in the city while the actual acreage of vacant land decreased. This process has led to difficulties in regeneration of the urban core located vacant parcels based on their irregular shape, minute size, and disconnected nature.

Based on these findings, this research focuses on the evaluating the factors which contribute to the conversion of a non-vacant parcel to vacant. Two sets of data were analyzed: 1) parcels converting from residential to vacant (set1) and 2) parcels converting from vacant to residential (set2). The conversion of each parcel’s land use status was assessed using variables related to physical characteristics (e.g. size of parcel, age of parcel, structure counts), spatial characteristics (e.g. distance from CBD) and economic characteristics (e.g. appraised value).

Using the occurrence of vacant and abandoned properties as a measurable indicator, this research hypothesizes that the conversion of a parcel from vacant to non-vacant 1) will have a significant relationship with larger parcel size; 2) will be located at a further proximity/distance from the CBD; 3) will have a significant relationship with the younger age of parcels and number of structures; and 4) will have significant relationship with high appraised parcel value.

The data for this research includes all residential parcels within the study area. Longitudinal data over a twenty-year span was collected and assessed in ten-year periods on a parcel level from 1990 to 2010. This research used a multinomial logit model due to the outcome of this research had eight different categorization of land use.
conversion patterns depending on the length of vacancy or activation. Results of set 1, examining parcels which converted from non-vacant to vacant, show that a statistically significant relationship with an increased number of new constructions built and distance from CBD. Results of set 2 show that a statistically significant relationship with a decreased number of constructions, a younger age of parcels, and larger size of parcel. Overall, this research shows that the parcels that become vacant tend to be new constructions with higher appraised values. Size of parcel did not prove to be significant when converting from non-vacant to vacant but had a significant relationship when converting from vacant to non-vacant.

References

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Abstract Index #: 203

TRANSFORMATIVE PARTNERSHIPS IN URBAN PLANNING; THE STOREFRONT’S RESIDENT-LED MODEL FOR COMMUNITY ENGAGEMENT AND TOWER RENEWAL IN TORONTO

Abstract System ID#: 149

Individual Paper

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In a time when the merits for community engagement in urban planning are generally well established, the next question that is posed is what kind of engagement process would provide the space for people to shape their neighbourhoods and their city. This paper explores a collaborative partnership model, called the Community.Design.Initiative. (CDI), that was used to successfully engage residents in the revitalization of apartment towers in a lower-income and immigrant community in Toronto. The CDI emerged from an ongoing partnership between a local community organization (the East Scarborough Storefront), a design think tank (archiTEXT), two architecture firms (Sustainable.TO and ERA Architects), and most importantly, community residents. Starting as an initiative to redesign the building of a local community center (The East Scarborough Storefront), the CDI grew to become a resident-led community development initiative, which successfully received funding under the City of Toronto Tower Renewal Program. This Program was established by City Council in 2010 to address the aging and inefficient nature of over one thousand Toronto residential apartment towers built in the 1950s to 1980s (City of Toronto 2014).

To better understand the CDI process and the reasons for its success within the Tower Renewal Program, three main points of research analysis are discussed in this paper: (1) what kinds of partnerships were formed through the CDI and the work of the East Scarborough Storefront; (2) how does the CDI process differ from the traditional opportunities provided by the City of Toronto for public input; and (3) what role did ‘sustainability’ play in the development of the CDI as well as the work undertaken through the CDI. This research is informed by David Harvey’s (1973, 1996) ‘right to the city’ and the social justice orientations of ‘sustainability’, as explored by Fainstein (2011), Agyeman (2003), and Marcuse et al. (2009). Building on this literature, emphasis is placed on viewing urban policy as a transformative force that can be utilized to resist unjust urban conditions and to bring forth a re-imagined city based on equity, democracy and diversity (Connolly and Steil 2009). The methodological framework used in this research is policy analysis, discourse analysis and semi-structured interviews with key informants. Based on a review of websites, City of Toronto policy documents, and Storefront reports, as well as interviews, the Community.Design.Initiative. Can be viewed as a transformative community engagement process that provided the space for residents to not only voice their vision for the neighbourhood but also to gain the
skills and build the partnerships necessary to make their vision into a reality. This research was undertaken independent of collaboration or supervision with a faculty member.

References


Abstract Index #: 204

THE NEW GROWTH COALITION: PHILANTHROPY AND URBAN REVITALIZATION IN US LEGACY CITIES 1990-PRESENT

Abstract System ID#: 172
Pre-organized Session: Legacy Cities: The Quest for Revitalization

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In the past three decades, non-profit organizations (NPOs) in US Legacy Cities have often become leaders in urban revitalization, responding to the consequences of their cities’ economic restructuring and depopulation. This phenomenon, coupled with reductions in federal funding for low income housing production and local economic development, has resulted in important changes in the composition of growth coalition, as new characters have joined the institutional ecology of those remaking these places. Where in earlier years, the power players were local business elites, mayors, newspaper editors, today the group has grown to include leaders of NPOs, anchor institutions and philanthropic foundations (Logan and Molotch 1987).

Serving as supporters and collaborators in urban revitalization-focused NPO work, philanthropic foundations have grown in importance as they committed millions of dollars to urban improvements. In addition, they incubated organizations, increased the capacity of local leaders, and collaborated with financial institutions to leverage capital for projects (Erickson 2009; Frisch and Servon 2006; Karlstrom et al 2007). As strong partners with NPOs and the public sector, their presence is thus challenging the traditional concept of the urban growth coalition.

Many scholars have documented changes in the growth coalition over time. Some have explored the rise of NPOs from relatively powerless neighborhood-based groups to potent political actors (Marwell 2007). Others have demonstrated the entry of “eds and meds” and others in urban revitalization activities (Birch et al 2013). However, no one has shown philanthropic foundations have and are influencing revitalization. The result is an inadequate understanding of the dynamics of 21st century urban revitalization.

To remedy this gap, this study examines the role of philanthropic foundations in urban revitalization in Legacy Cities between 1990-2013. It assesses the level and nature of philanthropic grant making in 50 cities, it compares philanthropic funding with CDBG allocations and identifies the recipients of foundation funding. Preliminary findings reveal that over the past ten years, foundations have allocated $6.9 billion to urban revitalization, 125% of total CDBG funding in this period. The findings also show that in one class of cities, philanthropic expenditures are not only important in terms of their quantity but also likely help reshape the growth coalition but in other types of cities the funding is less significant. For example, in large- and medium-sized cities (population above 250,000), foundation funding surpasses federal community development block grants (CDBG) by 145%. Further, their grant recipients tend to be intermediary institutions and local development organizations, the new players in today’s growth coalitions. In contrast, philanthropy seems to be less important in small cities (populations of less than 250,000), where CDBG exceeds philanthropic expenditure and grant recipients tend to be city and
county governments and public agencies, most often school districts. Finally, the early results show that while city size explains high levels of philanthropic expenditures, the presence of foundations in a city matters more. Furthermore, when per capita philanthropic expenditure is measured against poverty rate in each city, the presence of foundations is a greater determinant of higher levels of grant making. When taken together, these findings suggest that in some Legacy Cities, philanthropic foundations are attempting to resuscitate growth machine conditions through investment in NPO-led urban revitalization. Whether they are providing support to a NPO industry focused on revitalization or a beleaguered public sector, philanthropic foundation activity mimics that attributed to traditional growth coalition interests. In Legacy Cities, philanthropic foundations have partially replaced the position of strong business elite to form a new growth coalition.

References

Abstract Index #: 205
LEARNING FROM DETROIT
Abstract System ID#: 175
Pre-organized Session: Learning from Detroit

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Detroit’s experiences have long mirrored those of many cities: rising industrialization and population growth in the early twentieth century, suburbanization of industry and of white population following World War II, industrial restructuring that dismantled the region’s economic base from the 1970s on, and racial tensions throughout that hindered regional progress. Today, however, Detroit stands alone among large American cities in both the depth and breadth of its distress. Thousands of homes and many acres of land are vacant and abandoned. Residents are disproportionately poor and racially segregated. The tax base is decimated. What can scholars and practitioners learn about urban processes and planning from research on such an outlier city? We argue, based on examination of literature, that research on Detroit can advance understanding of cities and urban planning because of its extreme conditions. Researchers, for example, are able to observe phenomena in Detroit that likely exist elsewhere but go unnoticed. The magnifying effects of the city’s decline make the invisible visible. Detroit also allows researchers to untangle certain phenomena, such as gentrification, from the context of growth where they are usually observed, casting those phenomena in a new light. The large swaths of vacant urban land in Detroit are also an asset to researchers. They allow testing of hypotheses that would be difficult to assess in more intact, densely populated areas. Such research can have broad application to heavily developed urban areas elsewhere. Furthermore, Detroit research can expose the shortcomings of policies that presume strong real estate markets but do not work as expected in disinvested neighborhoods where property demand is very weak. Detroit’s extreme conditions also pose a challenge for some of the disciplines that contribute to urban planning. These disciplines have tended to focus on how and why cities and regions grow, who benefits
when they do, and how to renew growth when it ebbs. Not enough attention has been paid to understanding decline. Scholars have figuratively modeled urban phenomena only across the range that variables exhibit during growth, leaving out the range during decline. The challenge that Detroit poses for urban studies is to flesh out that model – to understand the spatial, social, political and economic dynamics of change and how decline may differ from growth.

References


Abstract Index #: 206

PRIVATIZATION OF CHICAGO’S PUBLIC HOUSING IN THE MIDST OF RECESSION

Abstract System ID#: 176

Pre-organized Session: High Hopes vs. Reality in Public Housing Reforms

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Background: Public policies since mid-1990s, such as HUD’s HOPE VI, aim to deliver affordable rental units in mixed-income housing developments and to catalyze neighborhood redevelopment through privatizing public property in select urban areas. The underlying rationale for these privatization reforms suggests that market investment into the built environment of places long associated with concentrated poverty is necessary because public-sector interventions have failed. If urban neighborhoods are to be radically reshaped, then a significant portion of public housing units and the renters living in them will need to be replaced with market-rate housing and related amenities that show potential for economic development.

When the 2007-2009 economic recession hit, however, financing for building the costly new housing became less stable and the promised revitalization stalled. A shift in the economic context potentially altered the redevelopment of urban neighborhoods throughout the nation. Few empirical investigations have analyzed what happens to these market-driven strategies during periods of sustained economic crisis. If macroeconomic forces are creating heightened constraints in the overall housing market, what is the fate of mixed-income development strategies during periods of economic downturn?

Methodology: The empirical case under investigation is the public housing reforms reflected in Chicago’s Plan for Transformation. Privatization reforms occurred on a broader scale in Chicago than in any other city in the county: over $1.5 billion in federal funding has produced more mixed-income developments than any other city in the country. This paper uses a vertical and comparative case study design to allow Chicago’s reforms to be investigated at multiple scales including the urban political economic context and within three neighborhoods where the mixed-income strategy is being implemented. The data sources employed include policy and financial documents, as well as 90 transcripts of original interviews conducted between 2008-2014 with public officials, policy advocates, housing developers and financial investors.

Findings: I employ Neo-Marxist and Neo-Institutionalist perspectives to explain the profit-driven nature of mixed-income development and to complicate assumptions about how the strategy leverages private financing. Rather, findings demonstrate a deep dependence on government subsidies to develop both subsidized and market-rate housing. First, the three sites are compared across factors (such as housing markets, neighborhood geographies, and planning mechanisms) to demonstrate how the recession impacted the sites differently. Then, the role of
government actors shows extensive public sector influence over the planned development of the sites. Most importantly, the retainership of vacant land and role (or lack thereof) of government officials in neighborhood planning results in heated debates about the most favorable use for public land that continues to be undeveloped and under direct control of the public housing authority. Grocery stores, urban farms, tennis courts, arts centers, and other amenities begin to be planned and developed as land swaps lead way to the physical development of these non-housing related resources.

Relevance: This investigation takes on heightened relevance due to shifts in the economy, which arguably make the mixed-income strategy harder to implement even as it is ascendant as a policy framework. Ultimately, the study seeks to discover new approaches for revitalization reforms that offer more equitable benefits for low-income households living in and around mixed-income housing redevelopments. Findings build on previous historical accounts that document how urban politics influences the reshaping of urban neighborhoods.

References
that have been announced, and other possible iterations. Variables that can be altered include maximum frontages, qualification of buyers, number of neighbors, and the affordability constraint.

The analysis reveals that while demand-side issues (i.e., affordability) exist, the supply-side barriers (i.e., restrictive guidelines and inequitable or illogical pricing structures) are the larger constraints for the program’s success. In St. Louis, the land bank’s side yard program as of March 2011 could find buyers for up to 4.7% of vacant residential lots, jumping to a maximum of 10.8% when the owner occupancy requirement is lifted for buyers. Through a comparison of policy scenarios, we conclude that program policy significantly influences a program’s potential success. State legislation regarding tax foreclosure auctions and elements of urban design likely also influence program effectiveness. We hope that this evaluation of the feasibility of side yard programs in combatting residential land vacancy will lead to research on the feasibility of other strategies for neighborhoods in shrinking cities.

Abstract Index #: 208
METROPOLITAN HOUSING MARKET RESTRUCTURING AND IMPLICATIONS FOR POVERTY DECONCENTRATION: THE EFFECTS OF FORECLOSURES ON THE SPATIAL DISTRIBUTION OF HOUSING CHOICE VOUCHER RESIDENCIES
Abstract System ID#: 1180
Individual Paper

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Over the past few decades, tenant-based housing assistance programs, led by the Housing Choice Voucher (HCV) program, have emerged as the dominant vehicle for assisted housing programs in the U.S. The primary goal of the HCV program is to spatially deconcentrate inner-city poverty by providing inner-city low-income households with housing voucher subsidies, which would give these households greater spatial mobility and enable them to access a wider range of private housing located preferably in lower-poverty neighborhoods (Winnick, 1995). However, in the wake of a major shock to housing markets—the foreclosure crisis—this goal of spatial poverty deconcentration may have been impeded as countless HCV tenants are at risk of displacement due to rental property foreclosures.

Though the initial outlook suggests that these displaced HCV tenants should have considerable difficulty in finding alternative affordable housing in similar quality neighborhoods, the outlook becomes ambiguous when further examining the supply-side and demand-side effects of foreclosures and how they may result in the increase (or decrease) of available affordable housing supply that rent to HCV households. From a supply-side perspective, there is clear evidence that owner-occupied properties that have been foreclosed upon are increasingly being converted into rental properties (Immergluck & Law, 2013), of which some should rent out to HCV households (DiPasquale, 2011). However, from a demand-side perspective, it is generally understood that numerous former homeowners have become renters, which drives up rental housing demand and reduces rental housing vacancy rates (JCHS, 2013). The increase in rental housing demand should negatively impact the availability of affordable rental housing as rental prices increase.

Given these conflicting arguments, this research paper endeavors to ascertain whether foreclosures have had a positive (or negative) effect on the spatial distribution of HCV households. Previous HCV research has shown that the majority of HCV households after relocation have difficulty in maintaining their residency even under normal circumstances. However, little is known about how these results may change given the major housing market shock.

As such, the paper employs both descriptive and quantitative analysis to answer the following three questions: (1) After a period of high foreclosures, is the spatial distribution of HCV households more dispersed and less concentrated in high poverty areas than prior to the surge in foreclosures?; (2) Does higher levels of foreclosures increase the number of HCV households in a neighborhood?; (3) Do foreclosures in lower-income neighborhoods result in more HCV households than in higher-income neighborhoods? While this research is on-going,
preliminary review of the data suggests there is considerable correlation between foreclosures and the spatial
distribution of HCV households.

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  investing in foreclosed homes in Atlanta," Urban Geography, 2013 (accessible online).
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Abstract Index #: 209
THREE REINFORCING CYCLES THAT AMPLIFY THE RISE (AND FALL?) OF MILLENNIAL GENERATION IMPACTS IN
CITIES
Abstract System ID#: 200
Pre-organized Session: Broad Scale Impacts of Millennials in the City

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The emergence of the Millennial generation into adulthood is a major force potentially reshaping cities.
Longstanding trends are being reversed, at least temporarily. Population is growing faster in some cities than
their suburbs, young adults are living more densely in inner city districts, and the white population is growing
again in cities where it has declined for decades. The question is how permanent are these trends: do Millennial
impacts foretell the future of cities or is it all a temporary phase?

The challenge for answering this question is that three cycles now coincide and reinforce, creating much
confusion. Those are the housing lifecycle, the rise and fall of births some 20-30 years earlier, and a business
cycle of boom-bust-recovery like none other, namely the Great Recession.

The normal housing lifecycle of young people is to launch into independent living in their 20s, often with
roommates in apartments in neighborhoods close to universities, entertainment, office employment, and transit.
That is followed by progression to independent households, usually with partners, and by early 30s there is often
passage into homeownership located in more outlying districts, and later in school districts attractive to families
with children. The Millennials are now positioned in the early stages of this housing lifecycle, and cities are
overflowing with a resurgence of 20-somethings.

But these Millennials actually are not all the same age. A second cycle is the rise and fall of births that form
cohorts. The baby boom generation is the most famous example, beginning in 1946 and ending in 1964 when
births plunged. What followed was a baby bust generation, known as Generation X. From a low point in 1975,
births then climbed rapidly to a new peak in 1990, some 32% more numerous than before, after which births
ceased their increase and declined 6% in five years. Millennials, born 1980 to 2000, straddle this rise and fall of
births, creating a powerful wave of new adults reaching age 25, and peaking now in 2015. The subsequent
deceleration will undermine young demand where it had been growing (Myers and Pitkin 2009). Should there be
a question about immigrants, the post 2000 slowdown in immigration has prevented that factor from making up
for the native born downturn the way it did in the 1990s.

These two cycles interact with a third cycle, the Great Recession and the slow recovery in both employment and
housing construction, which reduced opportunities in the years when Millennials’ surged into adulthood. That led
to slowing of their entry into the labor market, household formation, and other adult roles (Furman 2014). All
forms of mobility slowed during the recession, and lingering effects hold back slightly older adults as well. With
recovery, how much pent-up demand will be released, and in what directions?
This paper makes use of the American Community Survey and comparisons to longer historical patterns. Effects of the three cycles are carefully documented, and scenarios of future change are simulated. Much is still unknown about the volume of future housing opportunity and the degree to which Millennials have absorbed lasting preferences from their experiences in urban living. Explicit treatment of the three reinforcing cycles helps guide interpretations and may direct future research.

References
What accounts for the demographic differences between historic districts and their surrounding communities? Why are residents in historic districts more likely to own their own homes and hold a college degree, and less likely to live below the poverty line? On the one hand, historic designation could speed the process of neighborhood change by making communities more desirable to higher-income, college-educated residents and less affordable to low-income households. On the other hand, the composition of a neighborhood may change before the neighborhood is designated, and the demographic transformation may generate increased pressure to designate a historic district. Despite widespread interest in preserving historic communities, there has been remarkably little research on the demographic impacts of historic preservation. Instead, most research focuses on the property value impacts from historic designation, typically identifying a positive effect on residential property values (Been et al. 2014; Noonan & Krupka, 2011). Surprisingly, we know remarkably little about whether and how historic preservation affects the racial composition and socioeconomic status of a neighborhood. Recognizing this lacuna in studies of historic preservation, Ryberg-Webster and Kinahan (2014) identify “a glaring need for empirical research specifying preservation’s relationship to displacement and affordability.”

In this paper, we ask whether the designation of historic districts contributes to changes in the racial composition and socioeconomic status in New York City neighborhoods. In an attempt to study mechanisms for population change, we also investigate changes in the housing market conditions in a neighborhood. Does the designation of a historic district lead to rising rents or a growing proportion of homeowners in a community?

Bringing together data on historic districts with a panel of census tract-level economic and demographic data, we estimate a difference-in-difference regression accounting for prior trends in neighborhoods. We find little evidence of changes in the racial composition of a neighborhood after the designation of a historic district, but find that designation leads to a significant change in the socioeconomic status in neighborhoods. Our paper offers new empirical evidence on the way historic preservation affects the social and economic composition of neighborhoods. Designations attract high-income, college-educated residents into the community, potentially helping to revitalize neighborhoods and encourage further development (Listoken, Listoken and Lahr, 1998). However, our results also suggest that historic designation risks making neighborhoods less accessible to lower income residents, as critics of preservation like David Smith have contended (Smith 1998).

References

Abstract

The concept of youthification has been advanced to explain the growing concentration of young adults into higher density neighbourhoods with lower automobile use, particularly in the inner city of major metropolitan areas in the US and Canada. This has raised questions as to whether we can expect young adults to remain in cities and higher density neighbourhoods over time. Sustainability advocates have celebrated this trend as a sign of the success of Smart Growth and other planning policies aiming to curb sprawl. However, critics have argued that this trend is a temporary phenomenon, for instance due to increases in educational attainment that prolong the young adult lifestyle and childbearing.

The objective of this paper is to shed new light on the question of whether Millennials will remain a generation of urban dwellers. While there are several approaches to try and understand future housing preferences, this paper draws on emerging theories and empirical evidence that demonstrate that our long-term housing and location preferences are shaped, in part, by the type of residential environment we grew up in.

The paper will report on unique survey results of 400 people aged 18 to 40 in the US and Canada. Respondents were asked several questions regarding their demography, current housing, location and transportation patterns, and their preferences regarding the housing type (single-family home versus apartment), density and location (urban, suburban or rural) they wish to end up living in once they get older. Statistical analysis of young adults, under 30, will reveal whether there is a relationship between young adults’ past experiences and their future preferences. Examination of those over 30 provides direct empirical evidence on whether young adults’ preferences as they get older are linked to their past experiences. Variations of these trends by demographic and metropolitan areas will be explored.

The paper will reveal important and novel insight into the characteristics of emerging housing trends, and it will add much needed empirical evidence to the debate on whether Millennials will remain in cities and denser neighbourhoods over time. The results have important implications for housing demand forecasts and planning policies that shape housing supply. Can we expect a surge in demand for suburban single-family homes once Millennials age and some start to have children? Or will demand for higher density living continue? And how do these trends vary for young adults with different demographic characteristics living in different kinds of cities?

References

There is growing evidence that Millennials are living differently than previous generations. Instead of transitioning from adolescence to adulthood, Millennials linger in the stage of emerging adulthood, which is defined by having new experiences, moving to new places, and meeting new people (Arnett 2004). They are less likely to be married and more likely to be living alone or with their parents (Fry 2014). They express interest in being renters in walkable central city neighborhoods, although homeownership is still a part of their American Dream (Searcey 2014; Leinberger 2011; Kolko 2012). A theory is that these differences will transform urban housing markets by increasing demand for dense, rental housing in amenity-rich communities in the urban core and spurring innovative development projects (Leinberger 2011).

This research paper uses a multiple case study, mixed-method approach to describe the role that the real estate industry is playing in “cementing” Millennials’ residence in central cities during the 2000s and 2010s. It focuses on dynamics in Phoenix and Houston—young and sprawling Sunbelt cities with historically weak urban cores that had divergent experiences during the recent Great Recession and foreclosure crisis. The first part of the paper relies on Public Use Microdata Areas (PUMAs) information to track changes in the residential location of Millennials relative to the location of new housing construction completed in 2000, 2006, 2010, and 2013. Data on PUMAs' built environment, demographic, and socioeconomic characteristics reveals how the characteristics of Millennials’ communities are changing over time. In the second part of the paper, I construct a list of real estate developers that completed projects (multifamily or single-family subdivisions) in each city from 2007 to 2013 using informal interviews with planners, permitting data, industry reports, and other secondary sources. I conduct interviews with a sample of developers explicitly and not explicitly targeting the Millennial market and report how their motivations, processes, and products differ, if at all. Information obtained through interviews with planners overseeing the development review and permitting process in each region provide a broader perspective on differences among these groups of developers and their products. Finally, I triangulate the quantitative and qualitative data to draw conclusions about 1) how the real estate industry is affecting where and how Millennials live and 2) how these dynamics are reshaping urban housing markets, if at all.

References
While a flourishing literature exists on the topic of transit-oriented development, surprisingly little is known about 1) if and how transit investment and related new development around transit stations bring gentrification and displacement in transit neighborhoods; 2) if some neighborhoods are more susceptible than others; 3) which social and physical characteristics of transit neighborhoods play a role in encouraging residential and/or commercial gentrification and displacement; and 4) what planners and policy makers can do to protect transit neighborhoods from displacement. The study will address these questions within the context of Los Angeles County.

Methodology: The study incorporates both quantitative and qualitative research methodologies. During the first phase of the research we used census data and detailed parcel data that cover a 25-year period to develop a tract- and parcel-level database for all station-neighborhoods in Southern California in order to model past and current patterns of neighborhood change, including overall demographic change and displacement around transit stations. We also used the most recent 5-year American Community Survey (ACS) to develop a census tract-based time series with data on housing and demographic characteristics for areas within a half-mile radius of transit stations. A regression model uses the in-moves into a station neighborhood as its dependent variable and a number of neighborhood socio-demographic, economic, and land use characteristics as independent variables. During the second phase, we chose six case studies of different station neighborhood typologies and gathered detailed information about their physical and social characteristics through urban form observation, and surveys and interviews with neighborhood stakeholders. The purpose of this qualitative research is to better understand the changes that each of the case study neighborhoods has sustained in the last decade, and the forces behind them. This mixed methods approach will help us better understand the dynamics of gentrification and displacement in transit neighborhoods, develop a set of tools to examine the likely outcomes around TODs, and lead to the identification of strategies to minimize displacement in vulnerable transit neighborhoods.

Relevance of Work to Planning: This work is particularly relevant for professional planners who are becoming increasingly aware that transit neighborhoods may be susceptible to gentrification and/or displacement because the proximity of a neighborhood to transit may increase its desirability and lead to price escalation in land values, housing prices, and rents. Since there is little academic research on displacement around TODs, this work should also be of interest to planners in academia.

References

In the 1960s Vietnam Veterans returning from war faced many unique challenges. They were the first to suffer from post-traumatic stress disorder (PTSD) and experience homelessness at disproportionately high rates. Today, Veterans continue to be overrepresented among the homeless population as they are more likely to experience financial hardships linked to unemployment, mental health disorders, and substance abuse issues (Rosenheck 1994).
When compared to previous Veterans, those currently returning from Iraq and Afghanistan are experiencing even greater vulnerabilities to homelessness. Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) returnees have exponentially high rates of PTSD, traumatic brain injury, and challenges with reintegration. Whereas it took 9 to 12 years for the circumstances of Vietnam Veterans to deteriorate to the point of homelessness, OIF/OEF Veterans are seeking housing services just months after returning from war (Fairweather 2006). These servicemen and women are at notable risk of becoming homeless and present new challenges to our system.

Postmilitary social isolation, psychiatric disorder, and substance abuse have strong direct effects on homelessness (Rosenbeck & Fontana 1994). While Veterans require various supports, individuals most vulnerable to homelessness have limited social resources. Research suggests that social isolation can have an even stronger effect on homelessness than psychiatric disorder (Rosenbeck & Fontana 1994; Grigsby et al. 1990). The period following military discharge is crucial as personnel leave their combat units to readjust to civilian life. If we are to properly serve the needs of Veterans and prevent homelessness among this population, we must understand available resources and inefficiencies in our delivery systems.

Past experience tells us that Veterans will need adjustment support to reintegrate into their communities. Back in the 1970s the federal government enacted the Vetera’s Readjustment Assistance Act of 1974, increasing benefits available under the 1966 Bill, and Public Law 96-22 which founded Vet Centers to assist with readjustment problems. And yet, even with these efforts, homelessness in the Vietnam era population remains high requiring a recommitment of the U.S. Department of Veteran Affairs to ending Veteran homelessness by the end of 2015.

This paper interrogates the existing system of social service provision to understand the efficacy of the safety-net for recently discharged military personnel. Multiple services are put in place at the federal level and local actors are charged with service delivery, to what extent are these programs and services sensitive to the lived experience of active duty members? The military functions in a cohesive group setting reminiscent of a family. This system is regimented and exists in a care-oriented environment. Discharge requires a disaffiliation from the military and reintegration into society. As other studies note, social supports are a protective factor against homelessness. Housing stability may be impacted by a Veteran’s ability to replicate social bond formation outside of the military structure. Therefore, we are interested in whether or not Veteran programs are designed with this trajectory in mind; do support systems assist with the reproduction of community and social supports?

We will use a multi-site case study investigating Veteran services in Boston, Massachusetts and Los Angeles, California. Boston was chosen due to its accessibility and Los Angeles was chosen as a comparison because it has the largest homeless Veteran population in the country. Our research will consist of (1) creating an inventory of Veteran services by analyzing Federal funding streams and implementation at the local level, (2) analyzing service providers’ mission statements to assess whether or not they incorporate social supports into their model, (3) interviewing program officials and service providers, and (4) reviewing program evaluation efforts examining Veteran services to determine if increasing social supports yields differing outcomes for housing stability and/or homeless prevention.

References
WHY AFFORDABLE HOME DESIGN MATTERS

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The design of affordable housing can influence people’s willingness to allow affordable housing near them. Research in design and neighborhood opposition demonstrates that people tend to associate affordable housing as unattractive and poorly maintained (Tighe 2010). The present study tests whether residents are more willing to allow affordable housing near them if it is designed to look indistinguishable from market-rate housing.

Two hundred and nineteen people (99 men, and 120 women) from 34 states and Canada participated in an online survey recruited through a snowball sample via social media. Most participants reported that they were Caucasian, a homeowner, married, well educated, with family incomes greater than $50,000. The survey measured the participant’s willingness to allow affordable housing near them using a social distance scale. The survey also asked participants to choose which home they believed to be affordable between three market-rate homes and one affordable home. Half of the respondents completed the social distance scale as a pre-test, whereas everyone completed the social distance scale as a post-test. The analysis found that the homeowners and higher-income individuals were less willing to have affordable housing near them than the renters and lower-income individuals. The analysis also found that people were more willing to allow affordable housing near them after taking the survey. Perhaps, under the right circumstances, exposure to a correct definition of affordable housing or exposure to well-designed units (indistinguishable from market-rate housing) can increase people’s willingness to allow affordable housing near them. Developers, affordable housing agencies, and planners could use such information to decrease the stigma associated with affordable housing by educating the community on who lives in affordable housing, by using single-family affordable housing that looks like market-rate housing, and by testing neighbor responses afterwards to refine future designs.

References

I therefore analyze how TODs may impact a neighborhood’s social and built environment by identifying how residents and/or spaces can be overlooked in TOD-related policies and planning activities. I aim to emphasize how policies and their related activities can influence the development of accessible urban space and inclusive neighborhoods. Inclusive neighborhoods are those that provide a mix of amenities, services, and housing that, importantly, are accessible to all regional residents. Accessible reflects the ability of regional residents to reach and attain goods, services, activities, transit, and housing without hindrance due to physical, social, or policy related barriers. I therefore ask: How can TOD related policies and their associated planning activities help or hinder the development of inclusive neighborhoods?

To answer this question, I use a mixed-method approach concentrating on a case study analysis of St. Louis’s Delmar Loop (DL) light rail TOD site. I particularly use semi-structured interviews with planners in city, regional, and transit agencies active in the DL TOD. TOD implementation, however, may involve a variety of other actors or stakeholders. Accordingly, I also use interviews with business owners, community groups, and developers. I additionally utilize direct observations of the DL site. The observations provide intricate details unable to be ascertained from the interviews, documents, and quantitative analyses. For instance, I observed uneven development on different sides of the station: the east side contains uneven sidewalks and empty lots; while the west side holds wide, clear sidewalks and an abundance of businesses.

Initial results indicate that a lack of coordinated planning efforts have occurred within the Delmar Loop TOD site. The lack of coordination largely stems from an abundance of DL stakeholders with different goals. The various stakeholders agree on the basic tenants of TODs (i.e. mixed use developments, high walkability, and multi-modal transit). However, the activities undertaken; interpretation of policies; and the role of light rail differ greatly depending on stakeholder interest(s). Varying interpretations and activities based on policies (i.e. Title VI or ISTEAl) relating to transit and community development may potentially displace the area’s current and future residents, as planning and development in the DL is currently ongoing. Similarly, not focusing on light rail may not allow all St. Louis residents access to DL amenities. Overall, this lack of coordination and disperse activities has resulted in uneven development on different sides of the DL light rail station, different levels of funding for different spaces, and, in turn, somewhat of an exclusive, inaccessible neighborhood.

Research findings will contribute understanding to transit and community development by highlighting: (a) whether and how TOD policies and activities are designed to include or, critically, exclude specific neighborhoods and residents; and (b) best practices for coordinating light rail planning activities with community planning. Finally, this research demonstrates how residents in urban spaces may be socially and economically affected by planning decisions, which specifically addresses calls for planning scholars to more deliberately consider their research’s impact on social justice issues.

References

Abstract Index #: 218

EXAMINING THE LOCAL MANAGEMENT PRACTICES OF THE HOUSING PROVIDENT FUND PROGRAM IN CHINA, A CASE STUDY OF BEIJING AND SHANGHAI

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Individual Paper

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This proposed paper examines the local management practices of China’s Housing Provident Fund (HPF) program. HPF is one of the most important housing programs in China (Deng et al. 2011). Essentially a compulsory housing saving plan, the Chinese HPF program requires both employers and employees contribute a certain percentage of the employees’ salaries to the employees’ individual HPF accounts. In return, employees can withdraw their HPF savings and get subsidized HPF loans for qualified housing expenses such as home purchases and renovation. By 2012, the program has collected 5 trillion RMB savings, with the number of active contributors up to 102 million, and an outstanding HPF loan balance of 1.7 trillion RMB (Chen and Deng 2014).

Like other housing programs in China, HPF has a decentralized management structure. The central government sets up the principles and rules, while the management of HPF fund falls entirely on local HPF centers, who are responsible for collecting and distributing HPF fund within their jurisdictions. Nationwide, there are 409 HPF centers in 2011. Because of this structure, there is considerable flexibility in local HPF management. Local HPF administrations can adjust the contribution rate as well as the salary basis used to calculate the contribution. They also have discretion over the issuance of HPF loans. According to Chen (2009), the strong local government involvement is what distinguishes HPF lending from the commercial mortgage lending. However, despite occasional media reporting, very few studies have examined the local HPF management practices. We do not know to what extent the HPF has become a local housing policy tool and what role it has played in addressing local housing needs. Nor do we know whether the local variations in HPF management have made a difference in program outcome.

This paper will attempt to fill this gap by examining the HPF management in China’s two most important cities, Beijing and Shanghai. Specifically, it will investigate the following research questions:

1. How has the HPF management differed between Beijing and Shanghai? What factors have accounted for their differences?

2. What constraints or opportunities have HPF centers encountered in managing the HPF program?

3. How much flexibility do HPF centers have in tailoring HPF management to their local conditions?

To answer these questions, I propose a mix of quantitative and qualitative methods, including statistical analysis of data on the collection and uses of HPF fund and their relationship with local housing and economic environment, archival searches of government documents, local media reports, and academic publications, and last but not the least, field research and interviews of government officials involved in the HPF management. Findings from this project will have important implications for the future reform of the HPF program.

References
Despite extensive research on the foreclosure crisis, we know relatively little about the distribution and drivers of foreclosure over time, especially within communities of color. Due to data limitations, studies on delinquencies and foreclosures have tended to focus on a limited geographic area or on a single point in time. However, the evolution of subprime lending practices coupled with regional differences in house price dynamics means that some borrowers and neighborhoods experienced foreclosures earlier than others, and for different reasons. This temporal dimension is missing in contemporary analyses of the foreclosure crisis, but is of critical importance when we consider the degree to which communities benefited from federal programs designed to prevent foreclosures or mitigate their negative impacts on neighborhoods.

In this paper, I examine the temporal dynamics of the foreclosure crisis to show how the communities affected by foreclosures changed over time. I present three separate analyses. First, I show the racial and ethnic distribution of foreclosures over time. Second, I map the changing nature of neighborhoods affected by concentrated foreclosures, showing both local and regional differences in when defaults emerged and peaked. Third, I specify a multinomial logit model of mortgage default to show how the factors influencing the likelihood of foreclosure (including race, income, FICO score, loan product features, equity position, and macroeconomic conditions) changed over the duration of the crisis. These analyses rely on a national dataset that merges foreclosure data spanning 2006–2012 from a large, mortgage servicing database with data on borrower race and income from the Home Mortgage Disclosure Act (HMDA), as well as data on neighborhood level variables (including zip code level house price data and socio-economic and demographic variables from the U.S. Census). These merged data provide a unique opportunity to examine the racial and ethnic dimensions of the foreclosure crisis at multiple geographic scales and over time.

The analysis shows the ways in which delinquencies and defaults among African American and Latino borrowers who received subprime and risky loan products emerged well before the broader housing market collapse and the policy response. Indeed, the federal response to the foreclosure crisis has been characterized as “too little, too late, and too timid” (Immergluck 2013); in this paper, I argue that “too late” had a disproportionate impact on borrowers of color, because they failed to effectively address the underlying causes and impacts of predatory lending practices. Instead, the “policy window” to respond opened only when the crisis evolved into broader concerns over homeowner equity and widespread unemployment (2003). By analyzing the evolution of foreclosures and the federal response through a lens that explicitly considers the racial and ethnic dimensions of the crisis, I hope to contribute to a richer understanding of the repercussions of the crisis for borrowers and neighborhoods of color as well as to inform contemporary policy debates bearing on access to credit and lending for lower-income and minority households (Immergluck 2009).

References

abandonment escalated, and property deterioration and vandalism ran rampant. In response, the dominant policy discourse emphasizes demolition to address foreclosure-related vacancies and, more generally, to reduce an oversupply of housing plaguing neighborhoods in so-called “legacy cities.” Slavic Village’s built environment, though, is the tangible manifestation of the community’s rich immigrant and working-class heritage, with one local historic district, two National Register historic districts, a number of individual local and/or national landmark buildings, and additional historic resources that lack any current local or national designation.

The overarching research question guiding this study is: How do legacy city neighborhood stabilization efforts incorporate heritage and historic preservation? I use a qualitative case study of Cleveland’s Slavic Village, relying on key person interviews with the local CDC (Slavic Village Development), the private-sector Slavic Village Recovery project, and various partners. Other sources include neighborhood plans, organizational documents, and media. The findings demonstrate broad agreement that the neighborhood has a rich and important heritage manifested in its people, traditions, institutions, and buildings. At the same time, Slavic Village’s historic fabric is in peril because traditional preservation regulations, such as local historic districts, and incentives, such as tax credits and low-interest loans, are insufficient given the scale of devastation and the neighborhood’s current market and political conditions. There is an emphasis on iconic, architecturally stunning buildings, to the detriment of Slavic Village’s vast landscape of vernacular housing. Housing rehabilitation efforts often avoid the existing historic districts due to fear of regulatory burdens. And, political support for creative rehabilitation financing tied to historic preservation and for designating additional historic resources is nonexistent.

The research demonstrates that community developers may value heritage and historic buildings, but need to address a multitude of challenges, face political and funding constraints, and have limited preservation expertise. For historic preservation to play a role in Slavic Village’s revitalization, community developers need more flexibility, new (or modified) regulatory tools and funding, and improved means of code enforcement. To prevent a future in which isolated restored landmarks stand amid a sea of disinvestment, disrepair and demolition, preservationists need to engage in coalition-building and devise approaches that respond to the challenges of struggling neighborhoods across the country.

References

Abstract Index #: 221
BUILDING HOPE OR CONCENTRATING POVERTY: HABITAT FOR HUMANITY'S IMPACT ON URBAN NEIGHBORHOODS
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Individual Paper

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This paper examines the influence Habitat for Humanity (HfH) has had in Charlotte, NC over time and at the scale of specific neighborhoods. The Charlotte chapter of HfH has been one of the most ambitious and prolific in the U.S. It began building in 1983 and in its first seven years built 100 houses and raised more than $3 million (Williams, 1990). By 2010, Charlotte HfH had exceeded 1000 families served (HfH Charlotte website, 2015). Our examination of HfH’s impact on neighborhoods stems from a broader reflection on the lack of affordable housing policy in the Charlotte context. HfH defines its mission as to provide a “decent place to live” by bringing people together to build “homes, communities, and hope” (HfH Charlotte website, 2015). We explore whether HfH Charlotte is accomplishing this mission and, in the process, uncover details about challenges to reach this mission of creating “decent place to live” with a narrow focus of the house and with little or no attention given to the neighborhood surrounding it.

Our research has found that HfH in Charlotte predominantly builds in the lowest income communities, and we highlight issues connected to a model that provides homeownership to low-income families in only the most persistently disadvantaged poverty landscapes. While there is often an assumption that increased homeowner occupancy will solve many problems in low-income neighborhoods, some studies show that increasing homeownership may not actually lead to benefits for the homeowner or the neighborhood at large (Shlay, 2006). We, therefore, question whether the concentration of HfH homes in a neighborhood leads to any substantive change in socioeconomic conditions. We also question the efficacy of HfH’s model that places low-income households in neighborhoods with high crime, high poverty, and low probability of housing value appreciation. To explore these issues we examine the trajectory of neighborhoods with concentrations of HfH homes using an adjusted interrupted time-series (AITS) method (Smith, 2007; Kontokosta, 2012; Beck Pooley, 2014) and housing price data. We compare neighborhoods of similar composition both with and without HfH clustering to determine what effects a concentration of HfH homes has on a neighborhood. Discourse analysis of local media coverage supports the time series analysis to track neighborhood conditions before and after HfH’s construction activity. Finally, we explore the experiences of HfH homeowners to add a qualitative layer of understanding pros and cons of how the HfH model has played out in Charlotte. To address what are essentially qualitative issues tied to homeownership, we conduct interviews with HfH homeowners to assess their level of satisfaction with their homes and neighborhoods. We address issues of crime, property appreciation, and access to quality services such as schools for the families who bought into HfH neighborhoods. The interviews also explore the social fabric of neighborhoods and the possible divides between homeowners, HfH homeowners, and renters. Finally, the interviews address how concentration of HfH homes impacts the qualitative sense of place within neighborhoods. Through this research we offer a critique of HfH’s charity model and suggest that HfH and other public-private partnerships must pay attention to issues that expand beyond the home and into the neighborhood so that their work contributes to a future that does not simply reproduce segregated urban neighborhoods.

References
Why Bother Learning from Declining Cities? Aren’t they Mirror-Images of Growing Cities? NO--Because their dynamic processes are distinctively different from growing cities’ in at least four respects:

1. Spatially-Temporally Unpredictable
   where & when neighborhood residential & retail abandonment occurs is difficult to predict and, unlike growth scenario, is little influenced by land use planning; abandonment (esp. of larger multifamily buildings) may lead to rapid & involuntary (and unpredictable) residential turnover that ruptures social ties & erodes collective efficacy for remaining residents, thus (unpredictably) intensifying their exposure to violence

2. Psychologically Conservative
   Conservation of Resources (CORE) theory argues that people fundamentally are driven to obtain, expand and retain physical, social and psychological resources; but they behave differently when they are trying to protect themselves from shrinking resources due to asymmetry in valuing gains vs. losses—unwillingness to invest strategically in restoring/growing resources but rather hold on more tightly to the remnants of resources they have (which ultimately is self-defeating); another reaction to declining resources is scapegoating, since reduced self-esteem hinder one’s acceptance of personal responsibility

3. Dynamically Nonlinear
   neighborhood indicators do not change in a linear fashion on a declining trajectory, instead they are characterized by thresholds where the degree of residential and commercial disinvestment and flight of non-poor residents jumps sharply, often in catastrophic fashion; poverty concentrations in turn have their own associated thresholds of about 15-20% where they are strongly associated with rapidly increasing incidences of social problems in the neighborhood.

4. Incompletely Irreversible
   Downward trajectory different from upward trajectory of urban areas due to:
   - Technically (water, sewer, electric, transport infrastructure maintenance & repair costs cannot be proportionally scaled back if users decline, leading to overcapacity/underutilization problem)
   - Financially (pension & health care legacy costs of prior, larger generation of municipal employees cannot be proportionally scaled back if tax revenues decline; land prices can only decline until zero--cannot be negative)
   - Politically (repeated failures to halt the course of urban decline breed distrust of elected officials and all those not currently resident in the city, conspiracy theories & identity politics —social capital easy to erode, tough to rebuild)

References

EVALUATING SMART GROWTH POLICY IMPACTS USING LEED-ND CRITERION: A GIS METHODOLOGY
EVALUATING URBAN FORM HISTORICAL TRENDS FROM 1960-2010

The physical and social characteristics of the places where people live affect their behavior and long-term well-being. Consequently, policymakers, planners, and designers are seeking to reach ideal urban form. As one of the
smart growth initiatives, the Leadership in Energy and Environmental Design for Neighborhood Development (LEED-ND) rating system promotes compact development with the following goals: to reduce automobile dependence, increase walkability, allocate new development in infilling lands and brownfields, protect agriculture lands, and promote street connectivity with higher density and more mixed land uses, with better accessibility and housing jobs proximity. There are an increasing need of quantitative analysis about the urban form characteristics and consequences. To help meet these needs, we should define a way to measure smart growth trend in order to track their progress. Unfortunately, the inherent complexity of urban form cannot be captured by one or two variables.

Therefore, this research intends to measure the impact of the smart growth polices during a particular period of time, by evaluating the multi-family and single family homes built prior to 2010 based on LEED-ND scores. Using Hillsborough County, Florida, a framework for integrating the LEED-ND rating system with the geographic information system (GIS) to rank the built environment at the regional level is introduced.

This study attempts to define and quantify the urban form based on time series data using a parcel level scale of analysis. By assessing metropolitan growth patterns based on LEED-ND criteria, the methodology is used to present a highly detailed portrait of urban form pattern changes over time that will enable decision-makers to evaluate their growth management plans more effectively. By integrating the Fair Housing Equity Assessment (FHEA) principles to LEED-ND model, future research will address how urban form may be influencing the social equity and residential location’s accessibility to urban services.

This researchers have demonstrated that LEED-ND criteria can be used to measure and analyses the urban form changes at parcel level, in addition this study found that Multifamily and single family homes locations prior to 1970 are likelier to have more amenities and it’s located in areas in close proximity and high accessibility to urban center and other services. However a minor improvement and shift in home locations can be seen since 2000.

References

Abstract Index #: 224
SEARCHING FOR NEIGHBORHOOD OPPORTUNITY: A COMPARATIVE STUDY OF HOUSING CHOICE VOUCHER LOCATIONAL OUTCOMES IN DUVAL COUNTY, FLORIDA AND BEXAR COUNTY, TEXAS
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As the largest rental subsidy in the nation, the Housing Choice Voucher (HCV) program accommodates low-income households searching for suitable rental housing and encourages the expansion of opportunity. However, previous research has shown a shortage of affordable housing in opportunity-rich neighborhoods (Pendall, 2000). In addition, neighborhoods that are accessible to public transportation are often located in poverty-stricken, high crime areas (Been et al., 2010). These challenges not only result in voucher holders locating in suboptimal areas but also severely impacts the lease-up rate.
Building upon previous research on evaluating voucher locational outcomes (McClure, 2011; Pendall et al., 2014), this research develops a neighborhood opportunity assessment framework that includes three key components: housing supply, accessibility to opportunity, and neighborhood conditions. Each component contains a set of subcomponents and corresponding variables. This comprehensive framework is used to compare voucher locational outcomes in two Sunbelt counties: Duval County, Florida and Bexar County, Texas. The primary cities in these counties are Jacksonville and San Antonio, respectively. Both counties are characterized by their low-density, suburban-style development, while substantially diverse in racial and ethnic composition, offering a valuable lens through which to study HCV locational patterns. In this research, three questions are examined: (1) What are the spatial patterns of neighborhood opportunity in terms of housing supply, accessibility, and neighborhood conditions in both counties? (2) Is there a relationship between voucher distribution and neighborhood opportunity? (3) What is the spatial pattern of different voucher demographic subgroups?

The framework largely builds on newly-developed measurements and localized data sources, including point-level rental rates collected from real estate listings, land parcel-level estimation of proximity and number of opportunities that utilize road network distance to improve accuracy, and number of destinations that can be reached by any location using a transit travel time shed approach. Geographically weighted principal component analysis is used to create an index for each component. The indices are standardized and analyzed spatially for the metropolitan area using opportunity identification strategy to determine neighborhoods that are affordable, accessible, and opportunity-rich.

This research intends to advance rental housing policy for very low-income households. Beyond the value this framework provides for public housing authorities and their clients to succeed in locating qualified housing and furthering fair housing goals, local governments can use it to assess neighborhood opportunity regionally; a strategy firmly emphasized by Briggs (2005) for the future of rental housing policy.

References
housing. With SEM I tested the impact of campus form on a selection of outcome variables such as: (1) “freshman retention rate” as a proxy for “overall satisfaction with college life”, (2) “six years graduation rate” as a proxy for “learning environment”, (3) “crime rate” as a proxy for safety, (4) “travel mode” as a proxy for pedestrian and transit-friendly environment. Analysis of travel mode will include both students’ journey to school and university employees’ journey to work.

I have controlled the impact of campus form on the desired outcomes with a set of variables: (1) average SAT score as a proxy for student selectivity, (2) the percentage of classes with fewer than 20 student as a proxy of faculty resources, (3) type of institution (public/private & Research I/Research II), (4) enrollment profile classification, (5) the median households income of city 2013, (6) crime rate of city, (7) the degree of urbanization of setting, (8) the total cooling and heating days index as a proxy for climate. The hypothesized structural equation models displayed significant correlations between at least one of the three campus form dimensions with the outcome variables considering control variables. As an example, the results show that all three campus form variables had significant positive correlation with freshman retention rate. 1 unit increase for urbanization latent variable (with the range of 1.90), can increase the freshman retention by 4.8 percent. 1 units increase for greenness latent variable (with the range of 37.75) can increase the freshman retention by 0.2 percent. Also, 1 percent more on-campus residents can increase freshman retention by almost 0.1 percent. Overall, this research highlights the correlations of campus form and certain university objectives, such as student satisfaction, learning outcomes, safety, and travel mode.

References


Abstract Index #: 226

ESTABLISHING A FAITH-BASED AGENDA FOR THE PLANNING PROFESSION

Abstract System ID#: 281

Individual Paper

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There is much discussion about religion in the public square. With extremist organizations such as Boko Haram, ISIL/ISIS, al-Qaida/al-Qa’ida, HAMAS, to local American organizations such as Freedom From Religion Foundation to a real fear in some parts of the U.S. about Sharia/Shariah Law being instituted. To say it is a difficult time to talk about religion is an understatement. However, planning as been conspicuously silent on the topic of faith-based community development.

Other disciplines have dedicated spaces and journals to discuss the intersection of religion with their discipline (i.e., Sociology of Religion Journal, Journal for the Scientific Study of Religion, etc.). Many scholars from other disciplines consistently address the influence of religious within their discipline (i.e., Ram Cnaan, social work; Stephanie Boddie, social work; Robert Wineburg, social work, Mark Chasvas, sociology of religion, Nancy Ammerman, sociology of religion, Jo Anne Schneider, social scientist, Michael Leo Owens, political science, and the list goes on). Within planning, there are very few voices in the wilderness like Nisha Botchwey, June Manning Thomas, Jeffrey Lowe, Laura Reese, Sigmund Ship, and myself, who are striving to highlight the prominent role that faith-based organizations play in community development.
By using a qualitative content analysis examining specific themes in these individuals work, my research will map out an agenda going forward how planning as a discipline can better engage faith-based organizations in community development, economic development, community engagement, and community organizing.

It is imperative that now planning has a strong voice in this changing and shifting landscape and is able to contribute to the larger discussion on faith-based community development and give guidance to those in the field of religion, who leverage the capacity of their place of worship to be engine to drive change in their communities.

References

Abstract Index #: 227
THE CHANGING GEOGRAPHY OF URBAN EDUCATION: MARKET TRANSITION AND STUDENT SORTING IN SHANGHAI, CHINA
Abstract System ID#: 290
Individual Paper

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School quality plays a key role in residential sorting and spatial segregation in most cities with housing markets and residence-based enrollment policies. In Chinese cities, however, both housing markets and school enrollment based on residence (and home ownership) are relatively new phenomena. Whether and the extent to which student performance reflects residential sorting remains an examined question in Chinese cities. This study compares 15-year old students in different public middle and high schools in Shanghai in 2009 and 2012 using data from the Programme for International Student Assessment (PISA). We find (1) student performance is more related to family background in middle school while more associated with school quality in high school; (2) a higher degree of cross-school socioeconomic sorting among students in middle schools than in high schools; (3) an increasingly more important role of family socioeconomic background in explaining student performance over time. These findings correspond well to the development of the housing market and the different enrollment policies in middle versus high schools in Shanghai. This study provides an early piece of evidence of the development of the spatial socioeconomic sorting of urban households and its relationship to student academic performance, a crucial predictor of future individual development. As in many parts of the world, how to address the education inequality and social mobility implications of such residential sorting has become an important question for policymakers in Chinese cities transitioning toward the market economy.

Abstract Index #: 228
A METHOD FOR PRIORITIZING DEMOLITIONS IN A LEGACY CITY
Abstract System ID#: 358
Individual Paper

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Legacy cities (also known as shrinking cities) are cities that have experienced substantial job and population losses for decades due to forces like deindustrialization. These cities face complex challenges, like vacancy and abandonment, which are exacerbated by decreases in tax revenues and increases in demands for services. Given the abundance of vacant properties in these cities, tough decisions need to be made regarding future land use. Some legacy cities, like Detroit and Flint, Michigan, have already determined that parts of their cities will be de-densified or naturalized due to low housing demand. But strategies are needed to make these future land uses happen. One way to eliminate blight and to provide opportunities for new land uses is through demolition.

Given historic and ongoing population losses, many legacy cities turn to demolition as one solution to their surplus property problems. Demolitions are often deemed necessary because of the scale of the vacant property problem. While preservation and rehabilitation are certainly desirable, these strategies are not feasible or even appropriate in every neighborhood. Instead, strategies like preservation, rehabilitation, and demolition need to be targeted to specific neighborhoods or areas of the city based on sound planning principles. To date, few cities have derived empirical methods for determining which structures should be demolished. As far as the author is aware, no study in the planning literature has been conducted on strategic demolition methods, nor have studies compared the outcomes of different demolition strategies.

Given that demolition is a tool that legacy cities are, in many cases, aggressively using, the lack of studies on demolition activity represents a serious gap in the literature. If land use is within the purview of planners and demolition is necessary to rethink land use in legacy cities, then we, as a profession, need to be concerned with both the methods and outcomes of this activity. Because legacy cities lack the resources to demolish all of the properties that should come down, policy makers are faced with the tough decision of which properties to demolish now, and which properties have to wait (in some cases for years or decades) for some unknown future funding source. Unfortunately, these decisions have tended to be based on property conditions or political pressures alone (such as vocal neighbors or community groups), not on city-wide planning principles or strategy.

This paper will therefore add to the literature by outlining an empirical method for prioritizing demolitions city-wide, using the example of Youngstown, Ohio. The author uses geographic information systems to assign each property a demolition score based on four factors: property characteristics, neighborhood vacancy, neighborhood potential, and crime. The factors have various measures which are weighted depending upon their importance in the literature. Properties with higher scores are deemed stronger candidates for timely demolition.

In addition to creating a list of properties, the proposed method can facilitate the creation of hot spot maps of prospective demolitions, which can then be used to target neighborhoods for federal or other funding. Furthermore, the list of properties and the variables that were used to prioritize the properties can become the foundation for a formal demolition or blight-elimination plan. All three outcomes of the prioritization method (a property list, hot spot map, and demolition plan) will be discussed in greater detail during the presentation. Policy implications will be discussed, as well.

References
The nation-wide transformation of public housing in the United States has not been happening evenly or equally. Rather, HUD’s HOPE VI (Housing Opportunities for People Everywhere) initiative—a national program that has expended more than $8 billion to redevelop more than 250 public housing projects since 1993—has been implemented in wildly different ways, with markedly different intents, yielding dramatically different results. This paper, drawing on data supplied by HUD that has been cross-checked with other sources, attempts to provide the first full national picture of the types of mixed-income communities produced under HOPE VI, and attempts a first-ever comparison between what was proposed and what actually got built.

Public housing redevelopment under HOPE VI occupies a continuum between two attitudinal poles: one that favors creation of communities that minimize the post-redevelopment presence of the poorest, and one that attempts to retain public housing residents as the majority in the new community, while nonetheless seeking to mix incomes in more subtle ways. The mixed-income communities deployed in HOPE VI projects encompass a heterogeneous set of projects, which differ widely on several dimensions: 1) the distribution and range of household incomes included in the redevelopment effort, 2) the spatial strategy for mixing different income groups together, 3) the proportion of dwelling units assigned to homeownership and rental housing, and 4) the length of time that selected housing units are guaranteed to be subsidized for low-income families, and 5) the relative income levels of residents living in the surrounding neighborhood.

Moreover, there are often marked differences between what was initially proposed in a HOPE VI application, and what was eventually realized. Even though all 250+ public housing redevelopment projects received funding from the same federal program and were bound by the same federal regulations unless they received exemptions, local housing authorities and their partners exercised considerable discretion over the final form of mixed-income projects. This discretion reveals distinct choices about where and how low-income families should be housed. Of equal importance, in some places the long delays in implementation—whether caused by real estate downturns, tenant resistance, or both—often contributed to significant changes between the promises of the plans and the realities of the built result.

Based on a preliminary analysis of HOPE VI proposals sent to HUD, most redevelopment efforts stipulated that extremely low-income public housing families should constitute a minority of residents in the new community. Some redevelopments even intended to have a majority of units occupied by relatively wealthy households who would pay market rate rents. Conversely, some HOPE VI proposals allocated the overwhelming majority of apartments in a project to low-income public housing residents, while others favored substantial tiers of “affordable” housing that offered included shallower subsidies for working families who might never apply for public housing but still had relatively low incomes. The latter kind of community can house people with a variety of incomes, even though all or nearly all of those incomes are still considered “low.” Because vastly different social, economic, financial, and spatial mixes share the name “mixed-income”, many kinds of communities have been too easily lumped together under the same term. HOPE VI seems best conceptualized as an umbrella that covers quite a large variety of local practices and strategies.

References
LEGACY CITY REVITALIZATION: EXAMINING THE ROLE OF HISTORIC REHABILITATION TAX CREDIT INVESTMENTS

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The U.S. legacy city narrative is dominated by the struggles of these places with regard to population loss, economic restructuring, and disinvestment (Dewar & Thomas, 2013). These conditions have resulted in high levels of abandonment and vacancy, and have fostered an array of policy initiatives that are focused on demolition and vacant land management. However, historic buildings and neighborhoods are consistently noted as key assets for legacy city stabilization (Mallach & Brachman, 2013) and the federal historic rehabilitation tax credit (RTC) is one historic preservation tool that has been used to rehabilitate the urban fabric of these places. This research adds to existing scholarship examining the role of preservation in legacy cities by evaluating the neighborhood-level impacts of federal RTC investments in five large legacy cities (Baltimore, Cleveland, Philadelphia, Richmond, and St. Louis). Previous research has shown that the RTC contributed to growth in downtown housing (Ryberg-Webster, 2013) and supported place-based neighborhood revitalization initiatives (Ryberg-Webster, 2014). Other scholars have noted links between historic preservation efforts and gentrification outcomes including the displacement of low-income residents and racial homogenization (Smith, 1998), but few have tested this contention with rigorous quantitative methods. This research expands upon these literature threads by building an empirical model to test the effects of RTC investments in legacy cities on three indicators serving as proxies for gentrification related outcomes - change in total households, racial diversity, and economic diversity - at the census tract level.

A dataset from the National Parks Service provides address-level information about federal RTC projects occurring between 1997 and 2010, and is used in conjunction with U.S. Census data. Descriptive statistics and a difference-in-difference regression model are the primary methods used to answer the paper’s two research questions: (1) what is the spatial distribution of RTC projects across the legacy city landscape? (2) what are the impacts of RTC investments in RTC neighborhoods versus a comparison group of non-RTC neighborhoods between 2000 and 2010 on three outcome measures? The outcomes are measured using U.S. Census data including change in total households; race variables representing the interaction among whites, blacks, Hispanics, and other races; and economic diversity as measured by the ratio of residents with a bachelor’s degree or greater educational attainment to the number of persons in poverty.

Preliminary findings indicate that RTC investments are well distributed across the spatial landscape of the five legacy cities. Additionally, RTC neighborhoods are more likely to experience greater increases in total households. Change in economic diversity is mixed across the five cities, with Baltimore being the only city that appears to follow classic gentrification patterns. Racial diversity is increasing slightly in RTC neighborhoods, but at about the same rate as the comparison neighborhoods in most cities.

This work sheds light on the process of neighborhood revitalization in the broader context of decline and provides valuable insights for planners and policymakers working to improve the conditions of legacy cities and their neighborhoods. It also sharpens our understanding of the relationship between historic tax credit investments and neighborhood outcomes within the legacy city context, and sets the course for future research focused on deciphering the processes of neighborhood ascent in declining cities and regions.

References

Abstract Index #: 231
COMPARING EVOLUTION OF MOBILITY PATTERNS OF GENERATION Y AND GENERATION X: A STUDY OF THE GREATER TORONTO AREA
Abstract System ID#: 310
Pre-organized Session: Millennials in the City: Trends and Forecasts

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Using 1986-2011 household travel survey data from the Greater Toronto Area, this paper examines evolution of mobility pattern of Generation Y and compares the same to that of Generation X. The paper finds that teenagers and young adults from Generation Y are obtaining their driver’s license later; using public transit more; and driving marginally less as compared to the preceding generation. However, these differences begin to diminish as the young adults from generation Y reach their early 30s. The observed “lag” in driving is consistent with the “delay” in forming families/partnerships and bearing children in Generation Y. It remains to be established whether or not the presently observed mobility trends will continue even after Generation Y households include young child/children.

Abstract Index #: 232
THE INTERDEPENDENCE OF HOUSEHOLD AND BUSINESS RECOVERY DECISIONS AFTER HURRICANE SANDY
Abstract System ID#: 331
Individual Paper

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With climate change and rapid population growth in coastal areas, communities are facing increased risk of disasters that can affect the lives of many people. What hinders effective policy-making and assistance provision for long-term community recovery after a major disaster is a lack of theoretical understanding of how socioeconomic systems adjust in the wake of a severe shock and the paths these systems take to reestablish themselves. Current research, given the difficulty of studying such complex systems, has instead tended to address one sector of recovery at a time—housing and reconstruction, business recovery, economic recovery, or recovery policy.

After a major disaster socioeconomic systems are constantly adjusting to changing supply and demand conditions and this is reflected in the recovery decisions of households and businesses. These decisions are highly interrelated and their interaction can become a critical determinant of overall community recovery. Households and businesses are interrelated through the market economy system. Despite its significance, only a few studies have focused specifically on the dynamics of this relationship. The most substantial of these efforts has been undertaken by Chang & Miles (2007) who attempted to create an urban recovery framework that simulates...
interactions between households, business, and the built environment to measure community recovery outcomes, and more recently by Xiao and Van Zandt (2012) who modeled the interaction of households and business recovery, finding that they are spatially interlinked. While useful in their insights, these studies have their limitations. Chang & Miles depend largely on secondary, aggregate data to measure outcomes of recovery at a community-wide scale, which does not adequately capture the nuances of household and business recovery decision-making. Xiao and Van Zandt’s study improves upon this by using primary survey methods for data collection, but are still limited in their explanation of how household and businesses decisions adjust to each other’s decision processes over time and space. Given its role in guiding outcomes for community recovery, there is need for more research how and why business and household recovery are interdependent at the local level.

The goal of this study is to capture the interplay of recovery decision-making by households and businesses, thereby improving understanding of both why (i.e. the reasons) community recovery happens, or fails to, on ground, and also how (i.e. the mechanics). Specifically, we ask the following research questions: To what extent was household’s decision to come back to the same neighborhood after a disaster depended on jobs and community services? And to what extent was business’s recovery decisions dependent on household recovery? Data was collected through random sample surveys of 2,000 households and 2,000 businesses in disaster-affected counties of Brooklyn, Queens, and Richmond (Staten Island) in New York City in 2013. Data was also collected through in-depth key informant interviews of households and businesses in three specific New York neighborhoods (Red Hook in Brooklyn, The Rockaways in Queens, and Midland Beach in Staten Island). Survey data was analyzed using descriptive and inferential statistics, and interview and document data using qualitative content analysis techniques. The results of this research study can provide insights on why and how households and businesses decide to come back to the same community after disasters.

References

AN ANTIDOTE TO SPRAWL OR SUBURBIA REFRAMED?: AN OVERVIEW OF THE AMENITIES THAT DRIVE NEW COMMUNITIES

The suburban built form of unregulated development resulting in sprawl is not a new phenomenon, rather it is and has been the dominant land form since the early 20th century. As the impact of unrestrained sprawl has included negative environmental, financial, and social issues, various techniques have been incorporated to combat these impacts (Dunham-Jones and Williamson, 2009; Schmitz et al, 2003; Friedman, 2002). A prominent movement to provide alternative development patterns to unrestrained growth has been the planned community, which has ranged from Garden Cities like Welwyn and Letchworth in England to New Urbanism sites such as Seaside and Stapleton in the United States. Each of these examples looked to build communities that were holistic in nature, allowing for mixed-uses to take place within the confines of the development. A community located outside of the urban core that still possess many of the amenities of the core is at the heart of the planned community (Forsyth, 2005; Talen, 2005).
Throughout much of the history of planned communities the social and environmental ideals of the movement have been lost in their translation to capitalist development. The envisioned self-sufficiency of the Garden City became the pastoral Garden Suburb, the dynamic ideal of the New Town a relative blip compared to prevalence of the simple master planned bedroom community. This paper looks at one example of a planned community, which has been and continues to be promoted as a key tool for managing rapid urbanization throughout the world: New Communities. New Communities are large-scale, master planned and managed urban units promoted as alternatives to traditional, sprawling suburban development. As pseudo self-contained mini-cities, New Communities embody many of the ideals of smart growth minus the connections to existing communities and collaborative planning (Forsyth, 2005).

Amenities are understood to play a key role in the success of New Communities as alternatives to sprawling suburban development. First, they are used to created desirable spaces that lure residents to locate to them. Second, once residents have been attracted to the community, amenities help to organize their daily activities in ways that fulfill the promise of a less sprawling urban lifestyle. The careful consideration of amenities is a key aspect that separates New Communities from standard master planned suburban communities and has a direct influence on reducing sprawl.

In this paper we seek to understand claims made by developers in the U.S. and the U.K. that New Communities can combat sprawl. We analyze a survey of the development community on the topic of amenities in New Communities. Based on responses we conclude that the development community sees New Communities as more akin to traditional family focused bedroom suburbs with less robust amenities than necessary to provide the promised alternative to sprawl.

References

Abstract Index #: 234
DO LANDSCAPE SPATIAL PATTERNS MATTER TO SINGLE-FAMILY PROPERTY VALUES?
Abstract System ID#: 354
Individual Paper

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Background: Many previous empirical studies have assessed the influence of urban green space on economic value and documented several positive relationships between the urban natural environment and property value. Urban natural environments including trees and urban forests provide a wide range of ecological benefits including air and water pollution mitigation, habitat for wildlife, and storm water runoff reduction as well as social benefits to neighborhoods by improving quality of life through decreasing crime rate and promoting community involvement. Positive health benefits of urban green space range from decreasing childhood obesity,
asthma relief, and shorter recovery times for patients, to improved academic performance. However, although many empirical studies have examined the economic value of urban green space over the decades, they would not effectively capture the quality of urban greenery as they measured the value of urban natural environments calculating the total quantity of vegetation from aggregated land use data, and/or the proximity of a property to nearby green spaces. While a few studies have attempted to capture the quality of urban natural environments with objective measurements, the role of landscape spatial patterns shaped by urban forests on property value has not been examined sufficiently.

Purpose and Methods: The main aims of this study were to assess the relationship between landscape spatial patterns of urban forests and property value of single family houses by applying the landscape indices to the hedonic pricing model, and find which characteristic of landscape patterns is the strongest predictor of the housing value. To measure property values and housing structures, 8,551 housing transaction records from 2010 to 2012 in the city of Austin, TX were collected. To quantify the quality of landscape spatial patterns, this research used several landscape indices after classifying land cover types surrounding a property using Geographic Information Systems (GIS) and remote sensing using the high-resolution Digital Orthophoto Quarter Quadrangle (DOQQ) aerial photo imagery. FRAGSTATS, a spatial pattern analysis program, was utilized to compute various landscape indices for a half-mile airline buffer around each of the selected single family houses. Bivariate analyses and multiple regression models were used to predict single family property values.

Results: In addition to several significant correlates from housing characteristics including the total living area, existence of a pool, and waterfront view, the results showed that larger tree areas surrounding a single family home were positively correlated with higher housing transaction value (p<.001), while more isolated landscape spatial patterns (p<.001), more fragmented conditions (p<.001), and more irregularly shaped landscape spatial patterns (p<.001) were negatively associated with the transaction price.

Conclusion: This study helps fill a gap in the existing body of literature by assessing the influence of the quality of urban green space assessed by quantitative methods on single family housing value. The results of this research could be reflected in community design and planning policies, through increased awareness of the role of urban green spaces, and linking their spatial structure to design guidelines and frameworks to promote economic benefits.

References

Abstract Index #: 235
COMMUNITY DEVELOPMENT AGREEMENTS: ADDRESSING URBAN INEQUALITY THROUGH URBAN DEVELOPMENT PROJECTS
Abstract System ID#: 355
Individual Paper

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Policies such as community benefits agreements and project labor agreements have recently proliferated in land development and infrastructure. These community development agreements attempt to leverage urban growth to promote community development and social justice (Saito & Truong, 2014). In so doing, they constitute a new way to govern land development, one that can either circumvent or supplement existing land use approval and policy formulation procedures, in favor of deliberation directly between stakeholders to create policies through agreement (Been, 2010; Erie, Kogan & MacKenzie, 2010; Wolf-Powers, 2010). I use two PLA case studies and two CBA case studies to examine agreement implementation. I assess how these agreements succeed or fail to change existing patterns of inequality and urban development practices.

Project labor agreements (PLAs) are “collective bargaining agreements between contractors, or owners on behalf of contractors, and labor unions in the construction industry” (U.S. General Accounting Office or GAO, 1998). In contrast, community benefits agreements (CBAs) are “a documented bargain outlining a set of programmatic and material commitments that a private developer has made to win political support from the residents of a development area and others claiming a stake in its future” (Wolf-Powers, 2010, p. 141). In theory, community development agreements enable community stakeholders to become influential participants in the development process and to employ community resources to determine the agreement specifics (Parkin, 2003). As such, the community development agreement approach tries to build upon lessons learned from urban renewal and disinvestment, in which marginalized residents did not have meaningful input into the development projects that disrupted their communities (Lucas-Darby, 2012).

Community development agreements are becoming increasingly common throughout the United States. The first significant CBA occurred in 2001 in Los Angeles. It governed the $2.5 billion Staples Center development in downtown Los Angeles, and included $390 million in public subsidies and tax rebates. Since then, CBAs have proliferated throughout the U.S. (Saito & Truong, 2014; Wolf-Powers, 2010). While project labor agreements have existed since the 1930s, PLAs have been used to foster community development since the Port of Oakland Project Labor Agreement, formulated in the early 2000s (Johnston-Dodds, 2001). Subsequently, PLAs are increasingly employed to attempt to enhance regional equity, such as the Los Angeles County Metropolitan Transportation Authority (Metro) Project Labor Agreement, which concerns $40 billion in public infrastructure funding (Metro, n.d.). The Obama Administration formally advocated for more PLAs concerning public infrastructure, such that PLAs will likely become even more common (The White House, 2009).

Even though these agreements have become important to urban development, little research so far has examined how these agreements come about, their implementation, or their outcomes for community development. Early evidence suggests that these agreements produce mixed results; some community development agreements experience only partial implementation and fail to achieve their articulated goals (Saito & Truong, 2014; Hutson, 2013; Saito, 2012; Salkin & Lavine, 2008; Parkin, 2003). However, existing research largely overlooks implementation, how community development agreements fit into larger governance issues, and how CBAs relate to similar agreement types (Saito & Truong, 2014; Wolf-Powers, 2010).

In this paper, I generate four comparative case studies, using data from stakeholder interviews and archival research. I examine two project labor agreement case studies (the Los Angeles Country Metropolitan Transportation Authority Project Labor Agreement and the Yesler Terrace Community Workforce Agreement in Seattle, Washington) and two community benefits agreements case studies (the Park East Corridor Redevelopment, in Milwaukee, WI; and the Gates Rubber Factory Redevelopment, in Denver, CO) to assess community development agreement implementation.

References

Abstract Index #: 236
EXPLORING ACTIVITY ENGAGEMENT AND TIME USE OF MILLENNIALS
Abstract System ID#: 356
Pre-organized Session: Broad Scale Impacts of Millennials in the City

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There has been considerable debate over the past few years on the activity, travel, and time use patterns of young adults, often referred to as individuals of the millennial generation. Millennials are individuals born between 1980 and 2000. Recent evidence suggests that this group of individuals, largely born and bred in an era of ubiquitous technology, is exhibiting mobility patterns that are different from those of its predecessor cohorts. This group has been found to delay the acquisition of driver's licenses, exhibit lower rates of car ownership, and undertake fewer trips and travel fewer miles on a daily basis. There are a variety of hypotheses that have been postulated to explain this difference in travel and activity participation among the millennials including substitution of virtual mobility for physical mobility, structural changes due to the Great Recession, and changing preferences and attitudes.

Approach
This study is an attempt to explore and unravel the activity and time use patterns of the millennial generation using the American Time Use Survey (ATUS) series. The American Time Use Survey (ATUS) has been conducted annually by the Bureau of Labor Statistics (BLS) in the United States for just over 10 years. Recently, the Bureau has released the 2003-2013 multiyear time use data set covering time use records and information for the entire series of data. This data set provides valuable longitudinal information on the activity and time use patterns of individuals aged 15 years and over a 10 year span that includes the period of the worst recession in recent memory. Although this series of data does not constitute a panel data set, the longitudinal information in the multi-year data set can be analyzed to see how activity-travel patterns have changed over time for specific age groups, and how the recession may have played a major role in shaping activity and time use patterns. The individuals who were 19-30 years of age in 2003-2004 (the early years of the ATUS) would have turned 29-40 years of age towards the end of the period covered by the multiyear data. By comparing the activity and time use patterns of 19-24 and 25-30 year old cohorts across the years, the evolution in the behavior of this age group can be studied and allow us to investigate intercohort and within cohort change. This type of cohort longitudinal analysis will help shed considerable light on how activity and time use patterns change over time, and offers the explicit ability to account for the period of recession and its effects on activity, travel, and time use.

Relevance
In summary, this research is intended to offer a detailed exploratory and longitudinal analysis of the activity and time use patterns of millennials to better understand how and why their patterns are different and, the implications for well-being. It will also develop behavioral constructs that can help inform how millennials may be evolving over time in terms of their activity and time use patterns. Such insights are critical to ensuring that travel demand forecasting models are positioned to answer the policy questions of an evolving demographic.
References


AFFORDABLE HOUSING PROGRAMS AND NEIGHBORHOOD DIVERSITY: A SPATIAL ANALYSIS IN HARRIS COUNTY, TEXAS

This study examines the effects of affordable housing programs on neighborhood diversity based on a spatial analysis in Harris County, Texas. Moving beyond the conventional definition of diversity as racial and ethnic integration, this study holistically examines the distribution patterns of race/ethnicity, age and income at the census block group level and how the selection criteria of affordable housing programs impact the patterns.

Do housing assistance program criteria help people’s rental unit choice? Are there any specific limitations that prevent targeted affordable housing program beneficiaries from maximizing the advantages of the programs when finding an ideal rental unit and their prospective neighborhood? We investigate important criteria of the major affordable housing programs, sometimes working as barriers to potential affordable housing residents. It is shown how much Housing Choice Voucher (HCV) recipients in Harris County maximize their rent over the Fair Market Rents (FMR) and how the income levels of the recipients are compared to the criteria of Income Limits (IL) of the county. The statistics of relationship between the Qualified Census Tracts (QCTs) for Low Income Housing Tax Credit (LIHTC) units and the diversity level in corresponding census tracts are analyzed. Together, these analyses will determine whether those constraints significantly influence the choice of the rental house units and neighborhoods.

This research also examines the extent to which affordable housing residents are exposed to various neighborhood amenities, pedestrian infrastructure, crimes and school quality. This session mainly examines the patterns of the spatial autocorrelation of affordable housing recipients. GIS geocoded data sets of HCV and LIHTC housing units are graphically shown with census block group amenities and other neighborhood characteristics. Our spatial analysis reveals potential signs that clustered affordable housing units are being segregated from neighborhoods with desirable environments. The data analyses are conducted and displayed using GIS spatial analysis and spatial statistics.

The research suggests how urban planners can help affordable housing programs to accommodate more diverse groups in neighborhoods. Some criteria of the current housing programs have limited rental beneficiaries to certain demographic groups living in dilapidated areas. We can achieve the social equity of the housing programs such as increased neighborhood diversity across the whole county based on more detailed criteria of the housing programs.
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Ten years ago, the Brookings Institution published "Who Lives Downtown?" that captured my research based on a national sample 44 downtowns from 1970-2000. The sample covered 18 percent of cities having 100,000 population or more and represented 48 percent of the total population of these places. It included 90 percent of the nation’s top ten cities, 62 percent of the top fifty, and 28 percent of the bottom fifty. The sample downtowns were spread among the four main Census regions and, though the number of a region’s sample cities varied, they closely reflected the distribution of the nation’s urban population. Finally, the sample included 13 Legacy Cities, 30% of the total. Local authorities defined their respective downtowns by designating tract coverage.

The report looked at downtown population, households and their composition, median income, educational levels, racial and ethnic composition and tenure. It also compared residential growth rates in downtowns, cities and metropolitan statistical areas. The results described the downtown living phenomenon and the socio-economic characteristics of downtown residents within the frame of each downtown’s urban and metropolitan environments.

The report concluded with a classification or typology of city performance based on each city’s growth trajectory, quantity and density of the residential settlement patterns and key socio-economic characteristics of the population. The four categories were: 1. Fully Developed Downtowns, 2. Emerging Downtowns, 3. Downtowns on the Edge of Take-Off,” 4. Slow-Growing Downtowns and 5. Declining Downtowns.

Although the report did not single out Legacy Cities, as it turned out, this group of cities experienced a remarkable turnaround in the 1990-2000 decade with 77% increasing population. Of the remaining sample, only 70% exhibited positive growth. The question is did the trajectory continue?

This paper will revisit Who Lives Downtown? to examine what has happened to the sample with regard downtown residential growth post 2000, according to the measures used for the 1970-2000 study. It will examine the same socio-economic characteristics of the downtown population as did the 2005 study. Finally, it will pay special attention to the performance of Legacy Cities.

As the US Census is collecting the data differently then it did for the earlier study, this study will rely on the American Community Survey and Geolytics to reconcile the downtown census tract boundaries.

References

Nonprofit park conservancies fund and operate major public parks in dozens of U.S. cities (Harnik & Martin 2015). In 2007, New York City alone had 51 nonprofits dedicated to improving specific parks or its park system as a whole (Brecher and Wise 2008). These numbers suggest that park nonprofits are not just a temporary response to government cutbacks; they’re now an institutional feature of local governance. Yet beyond case studies of the most prominent and well-funded park conservancies, we know little about these groups. What we do know suggests the need for further study. Studies that compare park nonprofits have found major differences in terms of capacity and goals: some park nonprofits raise hundreds of dollars each year, others raise millions; some push for more public investment in parks, others push for less (Brecher and Wise 2008; Roy 2011). We can also expect differences between park nonprofits and other organizations that play a role in the provision of municipal parks, like “Adopt-a-Park” partners, “Friends of” groups, corporate partners, and other levels of government. But to date, no studies of supplemental park provision have addressed these other types of organizations. If cities are going to incorporate supplemental provision into the administration of city services, then we need to understand these differences so that local governments can effectively manage these partnerships and properly enforce norms of democratic governance. This will require an analysis of the entire organizational field of park provision, similar to previous studies on the structure of community development (Ferguson & Stoutland 1999; Yin 1998).

In this paper, I fill that gap through a case study of park provision in Detroit, a city where supplemental provision is especially important due to the city’s enduring fiscal crisis. Using information drawn from government records, nonprofit records, news media, social media, and word-of-mouth, I catalog park providers as comprehensively as possible. The Detroit case reveals a much wider range of park providers than previous studies. In addition to local government, these providers include churches, block clubs, and small businesses that sign agreements with the city to “adopt” local parks; real estate interests that program public spaces downtown; county and state authorities that provide grants for capital improvements and directly operate some parks, including the city’s signature island park, Belle Isle; groups of committed residents that form “Friends of the Park” groups; and community development organizations and social welfare nonprofits that have added park maintenance and programming to their portfolios.

Then I analyze the structure of this organizational field: how these organizations interrelate, who funds them, and what ends they serve. In addition to records and documents, this analysis draws on interviews with a sample of leaders representing the range of organizations directly involved in the park system, as well as higher-level organizations that provide them funding and technical assistance. I find an organizational field in flux. The largest corporate and nonprofit park sponsors, as well as the state’s Department of Natural Resources, have million-dollar budgets and professional staffs, and they work closely with foundations and city officials, including the mayor. They usually have full control of the public spaces they support. Smaller organizations are far more numerous, but few have close working relationships with city officials. Funding is scarce, and only a few established organizations have received significant grants, primarily for capital expenses like installing new playgrounds. Most “Friends of” groups have no budget beyond their donated labor. They focus on advocacy and basic programming: clean ups, nature walks, neighborhood picnics, and protests demanding more investment.
Like early community development organizations, the fate of these different park partners, and the direction they take the park system, will hinge on whether and how systems of supplemental park provision are institutionalized.

References


Abstract Index #: 240

A CURRENT INVENTORY OF VACANT URBAN LAND IN AMERICA

Abstract System ID#: 485
Poster

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Non-productive space is increasing in U.S. cities. From 2000 to 2010, the total number of vacant housing units in America increased by over 4.5 million, an escalation of 44% (Mallach, 2012). There have only been three national inventories gauging vacant land/abandonment in U.S. urban areas. This issue should be of paramount concern as many cities are experiencing decline.

The earliest study conducted was performed in 1963 by John Neidercorn and Edward Hearle in a report titled ‘Recent Land Use Trends in 48 Large American Cities.’ Results showed, on average, 20.7% of land in American cities were considered vacant. Ray Northam conducted a similar study in 1971 entitled ‘Vacant Urban Land in the American City.’ The study used similar measures as its predecessor but also used population change as a measure. On average, cities with over 100,000 persons reported around 24.5% of their lands vacant. It was also determined that as populations decreased in cities, vacant land amounts tended to increase. The most current attempt was a survey distributed in 1998 by Ann Bowman and Michael Pagano. The resultant book, Terra Incognita, was published in 2004 while its precursor article ‘Vacant Land in Cities: An Urban Resource,’ was published in 2001. Their population was also cities with populations over 100,000 persons. It also assessed abandoned structure amounts. An average of 15.4% of each city surveyed was reported to be vacant with a mean of 2.7 abandoned structures per 1000 persons.

The purpose of this study was to gather a current inventory of vacant land/abandonment in the urban U.S., examine vacant land trends by region, and compare results to previous surveys. Land area change per city/region, population changes, and vacant addresses were also used as measures. An online survey was distributed to all U.S. cities with 100,000 or more population in the U.S. (215 in total) from Fall 2013 to Summer 2014. The study had a 58% response rate (124 in total) with 79 cities having available vacant land data. The survey gathered data on the amount, types, characteristics, and designation of vacant land/vacant addresses. Because the data examining abandoned structures in preceding studies was highly estimated, this study used United States Postal Services (USPS) data on vacant addresses collected from the U.S. Department of Housing and Urban Development to assess abandonment. Therefore, all 124 responding cities could be evaluated in regards to abandoned structures, but on 79 on vacant land.
Findings show an average of 16.7% of civic area is considered vacant land nationally, with around 10,350 acres of vacant land per city. Overall, the ratio of vacant land to city size has increased by 1.3% since 1998 but decreased by 3% since 1963. Vacant land tended to vary by region; cities with higher amounts of vacant land tended to report lower amounts of vacant addresses, and vice versa. For example, Midwestern and Northeastern cities reported more vacant addresses (abandoned structures) while Southern cities reported higher vacant land. Surprisingly, populating cities with elastic boundaries reported higher levels of vacant land than did depopulating ones. Shrinking cities, particularly in the Midwest, reported the highest rate of abandonment, overtaking the Northeast who reported the highest abandonment rates in 1998.

Vacant structure determination varied by city with duration of vacancy and resident feedback being the most common method to designate a lot/structure as vacant. Cities also reported that most vacant parcels in U.S. cities are small, odd shaped, and disconnected, making them difficult to regenerate. Disinvestment, suburbanization and annexation were the primary causes of vacant land increase while policy reform, population in-migrations and growing local economies tend to help decrease amounts.

References


Abstract Index #: 241

**IMPEDIMENTS TO IMPLEMENTING MIXED-INCOME HOUSING PLANS IN CHICAGO**

Abstract System ID#: 374

Pre-organized Session: High Hopes vs. Reality in Public Housing Reforms

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The HOPE VI program from 1993-2010 has funded 262 HOPE VI Revitalization Grants to public housing authorities, which facilitated tearing down distressed public housing and replacing high-rise development with mixed-income housing. More specifically, the HOPE VI program marries subsidy policies with new urbanist design principles to guide the development of mixed income, mixed density communities. While some mixed-income developments are recognized nationally as best practice models, research indicates that mixed-income developments have varying degrees in which new urbanism and income mixing strategies are implemented (Smith, 2002; Vale, 2002). I suggest that differences in implementation found in HOPE VI developments trace back to changes in local actors’ level of commitment to plans for social and physical mixing strategies. Research on plan implementation and mixed-income developments assumes that consensus among stakeholders, financing, local housing market conditions, legal parameters, and political support influence the implementation of project plans (Dalton & Burby, 1994; Talen, 1996; Laurian et al, 2004; Turbov & Piper, 2005). This research asks what other constraints exist that influence actor commitment and determine whether new urbanism and income mixing strategies are implemented in HOPE VI projects?

This paper examines this question through a comparative case study of three HOPE VI planning efforts in Chicago that exhibit different outcomes. Despite being located in close proximity to each other, receiving comparable levels of funding, a simultaneous development timeframe, and overlapping actors, the implementation of these three projects vary widely: Westhaven Park is considered a nationally recognized model for public housing redevelopment, Roosevelt Square is led by a high profile team and significant community investment, but
remains largely unbuilt, and Jackson Square has been widely considered a disappointment by many involved in the project. This qualitative research uses 43 in-depth interviews with actors involved in the development process, as well as original documents to identify the implementation barriers that constrain local actors commitment to implement physical and social mixing strategies. I describe phases of development, which illustrate where and how barriers to implementation arise that influence actor decisions. I argue that the implementation of new urbanism is further constrained by 5 factors: planned development process, site constraints, community buy-in, accountability measures, and developer capacity. Overall, the implications of my research offer lessons learned and approaches for policy makers and practitioners to use to work more effectively within these constraints to implement new urbanism and income mixing strategies in future HOPE VI projects still underway.

References

ASSESSING THE DETERMINANTS OF GENTRIFICATION AND DISPLACEMENT IN THE SF BAY AREA
Abstract System ID#: 377
Pre-organized Session: Disadvantaged and Displaced in California

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As regions across country plan for and invest in Transit Oriented Development, communities are increasingly concerned about how new transit investment and related new development around transit stations will affect the lives of existing residents, particularly low-income communities of color (Rayle 2014). Locals are likely to benefit from improved mobility, neighborhood revitalization, lower transportation costs, and other amenities that spill over from the new development (Cervero 2004). However, more disadvantaged communities may fail to benefit, if the new development does not bring accessible housing and job opportunities, or if there is gentrification that displaces low-income and/or minority residents (Pollack, Bluestone, and Billingham 2010; Chapple 2009).

Using the case of the San Francisco Bay Area, this paper develops an innovative approach to understand and analyzing neighborhood change and displacement as it relates to transit oriented development. We draw from a multi-year research project which offers several methodological innovations. First, we develop a multi-level regional database, from the parcel to the tract to the city level, to better understand the role of property investment and turnover at a very local level, as well as the impact of city policies and regulations. Second, new metrics of gentrification and displacement are developed through community-engaged participatory research in nine geographically representative case study neighborhoods across the San Francisco Bay Area. Third, statistical analysis is conducted to assess the drivers and restraints to neighborhood change and displacement. Fourth, a ground-truthing methodology is developed and applied to validate the inputs and results of the analysis.

In this paper, we present results from three sets of data and analyses: 1) census-tract level analyses of social and physical neighborhood characteristics, 2) parcel level analysis of public and private investments, and 3) ground-
Comparing the results of this analysis to previous research we find that academic research (Freeman 2005) is significantly under-estimating the displacement phenomenon and we propose a series of metrics to correct these errors. We furthermore assess the impacts of anti-displacement policy as well as the timing and scale of change. This new methodology for estimating displacement could significantly improve the ways that academics and practitioners understand and mitigate the impacts of planning and development on low income neighborhoods and communities of color.

References

Abstract Index #: 243
HOUSING, HOUSEHOLD, AND ENERGY USE: REVEALING THE ROLE OF HOUSING CHOICE IN DETERMINING RESIDENTIAL ENERGY CONSUMPTION
Abstract System ID#: 380
Individual Paper

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Policies in place today have yet to achieve the level of greenhouse gas reduction necessary to stabilize our changing climate (Drummond 2010; Boswell, Greve & Seale 2010). One relatively untapped opportunity for planners to reduce emissions is in the residential sector, a sector responsible for 22 percent of the energy consumed in the US, and 21 percent of CO2 emissions (US Energy Information Administration 2013). Yet, this sector has been overlooked in the general energy debate (Swan & Ugursal 2009), and dismissed in planning scholarship. Instead, planning research has devoted considerable attention to the transport sector (Ewing & Rong 2008) or to improving energy efficiency of the buildings and appliances (Brounen, Kok, & Quigley 2012; Kavgic et al. 2010; Kriström 2006; Lutzenhiser 2014). This paper incorporates housing policy into energy policy, to provide new opportunities for planners to participate in residential energy policy.

Household and housing unit characteristics both directly determine a significant proportion of energy consumed in residential buildings. Households also determine the housing unit characteristics and therefore can have an indirect affect energy use through their effect on the characteristics of the housing unit (Ewing & Rong 2008; Steemers & Yun 2009). In this research, I characterize such indirect effects as housing choice effects on energy consumption. This research untangles the direct and indirect effects of household and housing variables on residential energy consumption to reveal the role of housing choice in residential energy consumption.

Using data from the 2009 US Residential Energy Consumption Survey (RECS 2009), I applied Structural Equation Modeling to estimate the effect of housing choice on per-capita energy consumption. The RECS is a national sample survey conducted by the US EIA that collects energy, housing, and household related data. The 2009 microdata contains information from 12,083 households selected at random using a complex multistage area probability sampling design.

Results show that housing choice effects play a predominant role in residential energy consumption, constituting more than 80 percent of households’ indirect effect on energy consumption. Such a significant housing choice
effect on residential energy consumption provides remarkable opportunities for planners to incorporate housing policy into energy policy. Planners can participate in residential energy management efforts by influencing housing needs and priorities of communities towards more sustainable compact housing units. In comparison to studies based on ordinary regression models, results of this research suggest that the indirect effects of many household characteristics on energy consumption are much larger than anticipated. Furthermore, this statistical method may prove useful for researching multiple seemingly intractable research questions of interest in planning research.

References

Abstract Index #: 244
WHAT HAPPENS WHEN A PROJECT-BASED RENTAL SUBSIDY ENDS? MOBILITY AND ACADEMIC OUTCOMES
Abstract System ID#: 383
Individual Paper
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The U.S. Department of Housing and Urban Development (HUD) financed roughly 850,000 units of housing through the project-based Section 8 program. In Los Angeles the project-based Section 8 subsidy already ended on 330 properties containing over 18,000 units. Nationally, there are over 3,000 properties, contacting over 150,000 units, where the project-based Section 8 subsidy ended. The number of tenants affected by a subsidy ending will only increase going forward because almost all rental units developed with a federal rental subsidy since the 1970s are owned by private entities that agreed to maintain their property as affordable for a fixed period of time. For example, there are over 50,000 units in properties in Los Angeles alone where an owner is eligible to leave a rental subsidy program, or will be eligible to do so in the near future. This paper identifies the impact that this event, and mobility more broadly, has on the academic outcomes of the youth who live in these properties.

The decision to end a project-based Section 8 contract is an exogenous shock to tenants who live in the property because HUD or the owner, not the household, makes the decision to end the contract. This event increases a household’s probability of moving and such housing instability may have negative consequences. One such consequence is poorer academic outcomes for the youth who live in these properties. This paper examines the relationship between mobility and outcomes using detailed building-level data for all subsidized properties, including those where a rental subsidy ended, and confidential student-level data provided by the Los Angeles Unified School District (LAUSD) between 2000 and 2014.

This paper provides an estimate of the impact that the end of a project-based rental subsidy has on the welfare of the households in these properties. Such knowledge improves planners’ understanding of the costs and benefits of preserving place-based subsidies, and whether existing policy tools provide effective safety nets. This paper also estimates the impact of mobility on academic outcomes more broadly, which is important as planners develop tools to decrease the negative affects of housing instability on low-income households.
WHO GETS HOUSING VOUCHERS IN A CITY?

Abstract Index #: 245
WHICH CITIES OFFER HOUSING CHOICE VOUCHER HOUSEHOLDS THE BEST ACCESS TO LOW-DISTRESS NEIGHBORHOODS?
Abstract System ID#: 395
Individual Paper

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Background: The Housing Choice Voucher (HCV) program is the nation's largest housing assistance initiative, serving over 2.2 million households. The program offers choice to the participating households in that they can live in any rental unit they choose, in any neighborhood, if the unit's condition is sound and the rent is reasonable. The program was expected to break down the barriers that keep the poor and minorities from gaining access to neighborhoods with low levels of distress. The expectations did not materialize.

Prior work: This paper extends the authors' prior work on the influence of race upon the availability of rental units with rents sufficiently low that they are eligible for program use and with locations in neighborhoods in low levels of distress. They found that racial and ethnic minority HCV households have few opportunities to locate in low-distress neighborhoods unless they locate in predominantly white or well integrated tracts (Schwartz and McClure, 2013). Pendall (2000) found that HCV households tend to spatially concentrate and that the level of concentration hinges on race. When assisted households are mostly black and other residents are mostly white, assisted households are much more likely to live in distressed tracts. McClure (2010) found that non-Hispanic white HCV households are able to enter low-poverty neighborhoods (a proxy for low-distress neighborhoods) at a rate greater than the availability of affordable units, whereas minorities are not. McClure, Schwartz and Taghavi (2014) found that, within large metropolitan areas, minorities located in low-poverty tracts less frequently than non-Hispanics whites, and that the pattern has not changed much over time.

Research questions: Building on this work, this paper will explore which metropolitan areas offer HCV households the best access to low-distress neighborhoods. It will seek to identify the characteristics that distinguish the markets with high HCV entry into low-distress neighborhoods from those with low entry.

Methods and data: The research reported here merges data on HCV households by race and ethnicity with American Community Survey data at the census tract level. The tracts are aggregated to the level of metropolitan areas. The metropolitan areas are examined for variation in the availability of low-distress tracts by the racial composition of the tracts as well as the entry of low-distress tracts by HCV households by race and ethnicity.

Policy Implications: This research should help to guide future efforts at economic and racial integration using vouchers as a relocation resource.
References


Abstract Index #: 246
THE U.S. HOUSING FINANCE DEBATE: IMPLICATIONS FOR URBAN FAMILIES, NEIGHBORHOODS AND CITIES
Abstract System ID#: 396
Individual Paper
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Since Fannie Mae and Freddie Mac were placed in federal conservatorship in 2008, there have been several rounds of policy debate over reforming the basic funding structure for U.S. mortgage markets. This paper will engage in this debate. I will start by discussing why housing finance is important to families and neighborhoods in the U.S. I will reframe the “homeownership versus rental” debate into one about how to provide the best housing opportunities to moderate and middle-income households and neighborhoods, and the role of housing finance in that process. Rather than oversimplify the debate into an “ownership is better” versus “renting is better” dichotomy, I examine the legal, economic and spatial context of housing tenure and focus on goals of maintaining affordable and sustainable homeownership options while also supporting affordable rental alternatives.

The paper will then delve into the impact that housing finance can have on affordable homeownership, and on neighborhoods and cities. To help inform the debate over the future federal role in housing markets, I will review the historical development of mortgage markets in the U.S. since the early twentieth century and the importance of a federal role in maintaining stable and sound markets. I will then turn to the current debate over the future of housing finance, reviewing some of the primary proposals that have been put forth from the perspective of what consequences they would likely have on urban families, neighborhoods, and cities. I will also describe a proposal that has received short shrift in the policy debate.

References


Abstract Index #: 247
WHERE THE OTHER HALF LIVES: MIGRANT AND SEASONAL FARMWORKER’S HOUSING LOCATION PATTERNS OF EASTERN NORTH CAROLINA
Abstract System ID#: 397
Individual Paper
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Farmworkers in North Carolina are among the most underserved residents in the state. Heavily relied on migrant and seasonal farmworkers, farmers offer housings for workers as part of compensation. However, the housing conditions are seriously substandard – even frequently called “camps” rather than housings – intensifying hardships to the farmworkers and their families.

Research on marginalized groups’ housing is rich but little research has been done on farmworkers’ housing. Recently, there has been a series of research by a research team at Wake Forest Medical School focusing on farmworkers’ housing conditions (Early et al., 2006), regulation violations (Arcury et al., 2012), housing quality and individual health (Quandt et al., 2013). However, none of them looked at the geographic locations of the migrant and seasonal farmworker housings with an environmental and social justice perspective. Montz, Allen, and Monitz (2011) and Gares and Montz (2014) would be the only two research studies considering the farmworkers’ housing locations related to their vulnerability in the case of natural disasters. Even under the limited data availability – an underrepresentation of both the numbers of workers and of farms that use this source of labor – their findings show a compelling need for emergency management for farmworkers.

The North Carolina Migrant Housing Act sets standards for the farmworker campsite but they are bare minimum addressing only three aspects—separations from standing water, separations from any area where livestock is kept, and the cleanliness of the site. Our research proposes a hypothesis: the minimal regulatory requirements of the farmworker campsite results in undesirable location patterns for housing. We seek to answer this research question: If undesirable campsite location patterns exist, what factors contribute? The primary data is retrieved from the migrant and seasonal farmworkers’ health screen data at the Kinston Community Health Center (KCHC), Lenoir County, North Carolina. This research only utilizes the camp locations and farmworkers’ basic demographic characteristics from the raw data limited to eastern North Carolina counties where there are concentrated migrant and seasonal farmworkers. We first identify farmworker camp locations and develop the profiles of farmworkers and the camps in eastern North Carolina. We then perform the geospatial analysis of farmworker camps using ArcGIS. Several spatial characteristics are considered, which include accessibility to main road/highway, accessibility to basic services, distance to other farmworker camps nearby, floodplain, as well as distance to the body of standing water and distance to where livestock are kept. Demographic and housing characteristics are also included such as the legal status and age of the farmworker, density and the type of camps (male-only, female-only or family camp).

The preliminary data show the patterns of farmworker campsite depending on the spatial distributions and housing characteristics of camps and demographic characteristics of the farmworkers. Our findings confirm that farmworker housings are located at environmentally vulnerable and socially isolated locations. UN Commission on Economic, Social, and Cultural Rights states that every adult and child has the right to live in housing that does not compromise their health or well-being. Due to the legal status, job security, cultural unfamiliarity, and language barrier, farmworkers tolerate the underprivileged housing conditions and poor quality of life. Although we only focused on the geospatial relations of campsite with other physical environmental features in this research, we could see the problems are much bigger than just a structure. The inadequate living conditions may stem serious mental and physical health problems to workers. Further research on housing-related workers’ quality of life and health issues is needed.

References


Abstract System ID#: 400
Individual Paper

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Do cities in decline lose the ability to finance themselves? We use a panel of 110 large American cities to examine the relationship between population decline, local fiscal capacity, demand for municipal services, demographic changes, and economic conditions. We find that the demographic, fiscal, and economic conditions in declining cities differ significantly from those with growing populations. Furthermore, we find evidence that the relationship between growth, fiscal capacity, and service demand is not linear across our entire sample. Rather, our findings suggest that both population decline and fast growth can result in reduced fiscal capacity and increased service demand. Finally, we find evidence of endogeneity in the relationship between population change, fiscal capacity, and service demand.

We create a panel dataset from the US Census Bureau, the Lincoln Institute's Fiscally Standardized Cities dataset, the Bureau of Labor Statistics, and the National Oceanic and Atmospheric Administration. Using these data, we create a standardized measure of fiscal capacity that holds constant actual tax effort of individual municipalities. This measure allows us to compare the underlying fiscal capacity of cities, based solely on differences in their economic bases. We also create a comparable measure of municipal service demand using factor analysis on a matrix of poverty, crime, income, and climate variation variables.

From our descriptive analysis, we find that cities facing population loss are more likely to experience increased poverty, slower declines in crime rates, and declines in racial diversity. Our regression results, estimated through a series of simultaneous equations, show that there is an endogenous relationship between population change, fiscal capacity, and service demand. Furthermore, we find that both decline and fast growth can result in fiscal challenges for cities. In sum, our findings are consistent with the idea that as cities lose population they have greater demand for municipal services and less fiscal capacity to meet those needs.

References
Since the 1960s, urban public schools have been experimental testing grounds for improving student outcomes. However, most of these programs have struggled to show better student outcomes, particularly in lower income communities. Reform programs are often based on business models or theories that do not account for the unique aspects of delivering an education; acknowledge the other supports students need to learn, such as stable housing, and outside-of-school activities; or recognize the complex school and community resources needed to implement school changes. The school choice and competition reform movement represents these types of assumptions: 1) creating school choice will create competition, thereby allowing the best schools, i.e., firms, to survive, which will automatically translate to better student outcomes; 2) if only students were permitted to do so, they could easily select and access better schools; and 3) competition alone is enough, even without the other systems and supports.

This longitudinal study of 40 families in Oakland, California tests the theory of school choice as a method for creating greater opportunities. Parents were interviewed through semi-structured, in-person interviews in the first interview, and by phone, two years later. They were asked about their school choices, how the choice interacted with their other daily activities and basic needs, and the types of opportunities and activities their children had at the selected school and elsewhere. The 40 cases provide a range of school choice examples and outcomes, with the added dimension of time. Background on the Oakland Unified School District and individual school performance was generated through participant observation of school and neighborhood meetings, data analysis, interviews with professionals, and content analysis.

The first round of interviews indicated that the increased distance necessary to exercise school choice often constrained parents' time and money for engaging at school and accessing other youth and adult opportunities. The opposite was true for most families utilizing their neighborhood school. The initial study also confirmed that low-income families are more likely to select schools for practical reasons or based on limited information. The second wave of interviews provided more detailed explanations on why the benefits of school choice have been difficult to realize at the school and household levels. As parents manage changing relationships, housing and work situations, their health, and their children’s other developmental needs, maintaining a daily travel schedule to a distant school, where the parent and child are generally not part of the immediate community, can be very challenging. From the school’s perspective, it can be difficult to build a “school-community” when students and their families are not connected outside of school. The longitudinal approach of this study also provides additional observations to test school performance in light of increased competition, as well as neighborhood impact. Combined, the school and interview data suggests that the current unplanned approach to school choice is not achieving the desired benefits. While the ability to choose another school has been important for students with special needs or different learning styles, and for families who move, promoting choice through competition, often at the expense of neighborhood schools, may be damaging in the short and long run, to families, school districts, and neighborhoods. The end result is little improvement in opportunities for students.

This study highlights the gaps between school-choice theory and implementation due to the lack of consideration for household resources and structure, time-space constraints, and school-community connections. The results emphasize the need for school and urban planners to work together on school policies with spatial ramifications. This type of collaboration may lead to multi-disciplinary solutions that support the whole child and the diversity of family needs, ultimately leading to better student outcomes and better neighborhood schools.

References
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This study examines how local power structures have influenced the politics of planning and decision-making in urban redevelopment projects in Istanbul. The theoretical motive for choosing this topic stems from the small number of thorough examinations of the reality of power structures in planning practice relative to its recognized importance. Arnstein’s 1969 article, A Ladder of Citizen Participation, is undoubtedly one of the most prominent works to deal with participatory approaches to planning history. Since then, although there have been numerous studies, models and methods developed regarding community participation, the planning literature seems to be rather sparse when it comes to the power structures and the interaction of “haves” and “have-nots,” terms which Arnstein notably used to define participation in her work, and how these affect development. In fact, unlike political science and sociology, which have examined societal power relations extensively, the field of planning generally lacks a body of central scholarly work that places the discourse at its core.

Examination of the wide array of questions surrounding planning, power, and politics and the challenges of participatory planning in the context of Istanbul may prove rewarding: on the one hand, as in most developing nations, democracy has not been fully institutionalized in Turkey. Pluralistic and participatory planning processes face significant obstacles there, such as excessively top-down traditions, inflexibility on the part of the public sector in establishing public-private partnerships, absence of measures to encourage meaningful citizen participation, and tendency of elite groups to influence public agencies for their own benefit. On the other hand, since the major consequences of the Marmara earthquakes of 1999, there has been an increasing demand by the public for safer and more resilient settlements in Istanbul that could mitigate the effects of a future major earthquake.

Based on the above problems and motives, the study seeks answers to the following research questions: What have been the strategies and processes of urban redevelopment in Istanbul? What are the power relationships among different actors and how do they influence urban redevelopment schemes? To what extent has the affected community influenced the process of urban redevelopment? To address these questions, I conducted in-depth interviews with 25 well-informed senior stakeholders from different groups who influenced the decision-making of two pioneering redevelopment projects of Istanbul: planners, local and central government officials, residents (homeowners and tenants), local businesses, community advocates, and planning faculty of local universities. Supporting secondary data involve archival documents such as physical and socio-economic analyses of case areas, project contracts, maps, plans, reports and media accounts. A distinguishing contribution of the study is that it uses fieldwork to compare and contrast the power dynamics of two distinctly different case areas; one that did not entail population displacement; and another where all residents were displaced. Preliminary findings have revealed that the involvement and influence of stakeholders in the two case areas were framed by the existing national legislative and political setting that generally prevails in centralized governmental structures and ignores or weakens local community involvement and less powerful actors. Nevertheless, the two cases also showed differences in the level of community participation and had different outcomes in regards to population displacement. Overall, lessons from this study would be important for planners and policymakers for addressing challenges in local redevelopment projects, and for creating planning processes which incorporate community participation and input.

References

Abstract Index #: 251
THE INFLUENCE OF DIVERGENT TEMPORAL FRAMES ON PARTICIPATORY PLANNING: THE CASE OF SCHOOL CLOSURES IN PHILADELPHIA
Abstract System ID#: 421
Pre-organized Session: Considering Schools in Community Development

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In 2013, the School District of Philadelphia closed 24 of its 242 traditional public schools, displacing thousands of students, changing the physical and social fabric of neighborhoods, and transforming access to opportunity for families across the city. Educational leaders argued that declining enrollments and underutilization of school buildings, deepening budget cuts, and poor performance required them to close schools. They claimed that closures and student reassignments would provide necessary cost-savings and improve educational outcomes. At public hearings, this action was met with vehement community opposition; parents and neighborhood residents argued that closures would negatively impact students and families and that redevelopment of school buildings would exacerbate development pressures in neighborhoods. In this paper, I present an in-depth case study of Philadelphia’s Point Breeze neighborhood to answer the question: How do individuals (residents and professional planners or policymakers) understand and experience school closure in relationship to broader urban changes, such as disinvestment and gentrification? Inspired by educational researchers who emphasize the need to understand the broader contextual factors (e.g., poverty and segregation) that influence educational systems (Anyon 1997) and drawing on interdisciplinary work on “geographies of opportunity” (Squires & Kubrin 2005), I argue that school closures not only serve as an education reform strategy, but also as an urban policy that shapes patterns of development and opportunity across cities. The extreme case of school closures reveals the multifold ways that public education provision is deeply embedded in planning issues – public participation; infrastructure investment and asset management; neighborhood amenities, stability and change; and metropolitan opportunity structures. Using frame analysis, I present findings from 51 formal and informal interviews with a combination of neighborhood residents; developers; and professionals from the school district, city government, citywide and neighborhood non-profits, and policy think tanks conducted in Fall 2014. Utilizing frame analysis allows me to uncover the complexity – and often incoherence – between multiple and sometimes competing understandings of the complex school closure process (Goffman 1974; Schon & Rein 1995). Specifically, I draw on and complicate Lynch’s dichotomous articulation of the ways that the “imitators and regulators of [environmental] change,” and those that must endure these changes each maintain a different image of time (1972 p. 3). Lynch argues that these images of time affect planning and development. In his research, “imitators and regulators” maintain a more abstracted and longer-term vision of urban development, while residents define a future based on a shorter-term, more “concrete and particular” sense of time that is based on their daily activities (Lynch 1972: 19). My analysis in Philadelphia also shows that divergent temporal frames contribute to tensions that surround the closure decision-making processes and subsequent sales and redevelopment of closed school buildings. Unlike Lynch, my findings do not reveal clear dichotomous lines of residents and professional and highlight the primacy of the past for many stakeholders. Many individuals ground their concerns in a long historical trajectory, framing school closures as the latest act in a protracted effort of urban demolition in the name of revitalization – dating from slum clearance at the turn of the 20th century through blight removal and Urban Renewal in the 1950s. Others are more focused on present conditions and future predictions, emphasizing fiscal crises and framing closures as an inevitability that will ultimately yield equity gains for disadvantaged communities.

This research reinforces and clarifies the ways in which schools are an important part of urban infrastructure and neighborhood change. By highlighting the centrality of temporality, I provide new empirical research that contributes to framing theory and suggest avenues for participatory planning processes.
NEIGHBORHOOD TYPOLGY AND CHANGE IN THREE RAPIDLY GROWING AMERICAN METROPOLITAN AREAS, 1980-2010

Metropolitan areas in the United States have grown in importance since 1980. An overwhelming majority, over 80 percent, of Americans lived in a metropolitan area in 2010. Although growth is occurring, there are differences in the trajectories of metropolitan areas. For example, the 100 largest metropolitan areas have experienced different rates of population growth. Further, the growth patterns of individual areas have not been consistent decade to decade (Frey, 2012). While population growth has been uneven in each metropolitan area, there are regions that have, since 1980, experienced overall rapid population growth. Based on the 2013 Metropolitan Statistical Area delineations produced by the United States Office of Management and Budget, of those metropolitan areas with a population of over one million in 2010, the top five fastest-growing have each experienced population growth in excess of 165 percent. These changes have occurred at the same time that shifts have materialized in the social geography of metropolitan America (Frey, 2012). Given their increasing size and importance, understanding social changes in these fast-growing metropolitan areas has become a topic of great relevance for urban planners and policymakers.

Social change is complex and includes multiple variables, such as race, income, education level, age, unemployment, poverty levels, and even housing value (Kitchen & Williams, 2009; Mikelbank, 2011; Wei & Knox, 2014). While there is important information to be gleaned from focusing on one or even several of these variables, a more comprehensive vision of temporal and spatial social dynamics is needed. Analyzing change in neighborhood typology over time has emerged as a way to explore multivariate social changes in metropolitan areas across the United States (Wei & Knox, 2014). Neighborhood typology analysis has also been used to investigate social change over space and time in a single metropolitan area (Mikelbank, 2011). One suggested path for further research is to compare neighborhood change in study areas that are similar (Mikelbank, 2011). To do this, a common trait of the potential metropolitan study areas would need to be identified.

To date, no study has compared neighborhood typology change over time and space in metropolitan areas that have the common trait of rapid population growth. This project addresses this gap by addressing two research questions. First, what types of neighborhoods have existed in rapidly growing metropolitan areas, and how has the spatial distribution of these neighborhood types changed from decade to decade between 1980 and 2010? Second, are there similarities between the neighborhood typologies and changes in these growing metropolitan regions? Potential study areas were limited to those Metropolitan Statistical Areas that had a population of over one million in 2010. Of these, the three fastest growing metropolitan areas in the United States between 1980 and 2010 were Las Vegas-Henderson-Paradise, Nevada; Austin-Round Rock, Texas; and Raleigh, North Carolina. Principal component analysis (PCA) is used to create a socio-demographic index to examine census tract level
data for these three study areas. Then, hierarchical cluster analysis is used to group census tracts that have similar socio-demographic index scores.

This study advances the existing body of work on neighborhood typology trends by applying the techniques to a comparative study of metropolitan areas with a common trait: rapid growth. Three metropolitan regions which have not been well-studied or compared are the focus of this research. Additionally, by analyzing social dynamics through multivariate neighborhood change, this study advances the understanding of how the social dynamics of metropolitan regions can develop while undergoing rapid population growth. The findings of this research have important policy implications for long-range urban planning and the development of limited resources over time.

References

Abstract Index #: 253
THE EFFECTS OF PUBLICLY ASSISTED REDEVELOPMENT PROJECTS ON AFFORDABLE HOUSING IN PITTSBURGH'S EAST LIBERTY NEIGHBORHOOD
Abstract System ID#: 582
Individual Paper
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Pittsburgh’s transformation from a smog-ridden steel town to one of America’s most livable cities is a story often told. Former steel mills have been transformed into mixed-use developments, factories into high tech office space, and neighborhoods, like East Liberty, are experiencing large-scale revitalization. This paper is part of a larger dissertation that examines how recent economic development initiatives interact with different populations to affect processes of neighborhood change. Specifically, this paper analyzes the impact of publicly assisted redevelopment projects on the provision of affordable housing for low-income residents in Pittsburgh’s East Liberty neighborhood.

East Liberty, a historically Black neighborhood, was decimated by a large-scale urban renewal project that razed the area’s commercial and residential center in the 1960s. Massive public housing projects, called the East Mall, were constructed in the neighborhood to house displaced residents, but ultimately resulted in the concentration of poverty and ghettoization of the city’s Black population. These housing projects were recently demolished as part of a neighborhood-wide redevelopment plan, which again resulted in the displacement of low-income residents. The redevelopment of East Liberty also includes Bakery Square, a LEED-certified, mixed-use development in a former Nabisco factory that is home to Google’s Pittsburgh office, and high-end retail and restaurants catering to the new residents of the neighborhood. This paper employs a mixed-methods approach that combines a difference-in-difference model to analyze the relationship between redevelopment and housing price, with stakeholder interviews, census and building permit data, and a content analysis of planning documents.

While this research is on going, preliminary findings indicate that less than fifteen percent of East Mall tenants reside in newly constructed, mixed-income housing units and that this is largely explained by a deficit of low-income, and very low-income units. Stakeholder interviews confirm that former East Mall residents were forced to relocate to older parts of East Liberty or the adjacent neighborhoods of Larimer and Garfield. Results from the
difference-in-difference model suggest that housing price in East Liberty has increased due to recent redevelopment.

This paper contributes to planning practice and scholarship by locating the effects of publicly assisted redevelopment projects within the context of affordable housing and revitalization efforts in US postindustrial cities.

References


Abstract Index #: 254

INFORMALITY AS A MODE OF DEURBANIZATION: PROPERTY AND THE SHRINKING CITY

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The literature on urban informality frames it as a “mode of urbanization” -- one of the pathways through which the growth of urban areas occurs (Roy, 2005). In this paper, I posit that urban informality also serves as a mode of deurbanization – one of the pathways through which undevelopment occurs. As neighborhoods empty-out, poverty concentrates, and property values fall, the legal, economic, social and spatial mechanisms that ordinarily reproduce formal property ownership break down. Absent appropriate policy interventions, the result is widespread informal property ownership. People take over land that does not belong to them, live in houses to which they have no lawful claim, and buy property without getting clear title to it. These informal ownership arrangements can contribute to the decline of neighborhoods but can also make them more accessible and liveable places. I illustrate this thesis through a qualitative and quantitative assessment of property relations in Detroit. While informal ownership is readily observable in Detroit, it occurs in circumstances that suggest that it may be present, to a lesser degree, in declining neighborhoods everywhere. In this way, Detroit serves as an “extreme” case – an unusual circumstance whose study allows researchers to develop a richer, deeper understanding of hard-to-observe phenomena (Yin, 2009). This research contributes to the literature on informality in the United States (Ward, 2004), on the evolution of property rights (Merrill, 2002), and on the distinctive processes through which decline proceeds in shrinking cities (Glaeser & Gyourko, 2005).

References

DO SHRINKING CITIES ALLOW REDEVELOPMENT WITHOUT GENTRIFICATION? AN ANALYSIS OF AFFORDABILITY BASED ON HOUSING AND TRANSPORTATION COSTS

Abstract Index #: 255
Abstract System ID#: 453
Individual Paper

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Recent press coverage and academic work has highlighted an emerging hypothesis in ongoing research on shrinking cities: downtown revitalization is creating a loss of affordable housing (e.g., Silverman), leading to gentrification. However, we hypothesize that revitalization in shrinking cities may support, rather than diminish affordability, when affordability is measured as the costs of housing and transportation combined. This paper employs the Location Affordability Index (LAI) to determine whether there are differences in housing + transportation locational affordability between block groups that experienced redevelopment, decline, or no statistically significant change between 2000 and 2010. Redevelopment is measured as changes in place-of-work employment and residential population change over the decade.

On the housing side of the equation, recent research shows that in weak market cities, excess real estate supply prior to downtown redevelopment may be able to absorb new demand without displacing arts-based employment, an industry traditionally vulnerable to gentrification (Ganning, forthcoming). It stands to reason, then, that adequate supplies of affordable housing might remain as well. On the transportation side of this equation, revitalization can create jobs, which can reduce or eliminate commuting costs. Neighborhood-level investments also often pay for safety and public space upgrades which, among other things, facilitate walking. Increased density brought about through redevelopment can also provide the necessary population to support public transportation improvements. We thus hypothesize that the transportation savings realized through neighborhood redevelopment may improve affordability conditions.

We will complete this analysis for owner and renter households separately using the LAI data as presented by HUD, for households earning the regional median income, those at 80% of the median income, and households at half the regional income. For each of these household types, we will analyze overall affordability, as well as its component parts of housing and transportation, for each of the three types of block groups identified (redeveloping, declining, or no significant change). Preliminary results support to our hypotheses.

An understanding of the dynamics of affordability of housing near redevelopment should take stock of both housing and transportation costs. Yet, this has not been done to date. Such an analysis will allow researchers and policy makers to leverage redevelopment for social equity gains through reduced transportation costs. In doing so, planners and policymakers can leverage both subsidized housing dollars and transit funding more efficiently and effectively in a way that maximizes the benefits to low income households.

References
NEIGHBORHOOD DISORDER OR RESILIENCY? | ANALYZING CRIME PATTERNS USING AGENT-BASED MODELING

Abstract System ID#: 465
Individual Paper

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Neighborhood Lifecycle Models predict urban decline from factors such as population mobility, housing stock aging, and even population diversity to explain neighborhood ‘disorder,’ often measured as localized crime. It is presumed that these interactions create a culture of crime and disorder, as first conceptualized by Shaw and McKay (1942). Linear neighborhood lifecycle models make fundamental assumptions about people, relating to their governance and their culture, and it is not surprising that such models took off in response to high levels of inner-city crime during the 1980s and 1990s (Schwirian, 1983). Significant challenges to such thinking have occurred, suggestive that social networks are adequate sources of resilient cultures and highly-functional social norms (Innes & Booher, 2010; Ostrom, 1990). In addition, urban crime patterns may be impacted by land use change such as demolition, abandonment or large infill projects that disrupt social networks in particular neighborhoods rather than the other way around (Lin Liu & Eck, 2008). Networks of adaptive, diverse and interdependent populations interacting with each other and their environment can result in neighborhood resiliency as opposed to “disorder.”

Using agent-based modeling techniques, crime patterns in Columbus, Ohio neighborhoods were analyzed over the past four decades framed, first, with inputs based on the traditional Neighborhood Life Cycle model, and, second, a separate model with a focus on land use change and more complex interactions between people and their environment. The results from these models were then compared to the actual urban neighborhood crime findings in Columbus. It was found that, in certain circumstances, the agent-based model based upon land use change was more predictive than the Neighborhood Lifecycle agent-based model when forecasting where in Columbus intractable crime verses reversed crime patterns occurred. This finding suggests that social networks, when left undisturbed by large top-down land use changes, are able to effectuate needed changes in their own environment to combat urban crime.

References


SCHOOL IMPROVEMENT DISTRICTS: PLANNING, PUBLIC SCHOOLS AND THE EQUITABLE REDEVELOPMENT OF URBAN NEIGHBORHOODS.

Abstract System ID#: 492
Individual Paper

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This paper lays the groundwork for a new placed-based intervention – School Improvement Districts. Only recently has the Planning community begun to link elementary public education to urban economic development and "place-making" – and it is these connections which provide the impetus for this study (Vincent, 2006).
Planning’s relative neglect of public education is surprising given that public school quality may be one of the leading drivers of residential demand, and thus a key consideration when planning cities (Dahlberg et al., 2012; Silverman, 2014).

This paper argues that school quality may be one of the greatest untapped economic development resources in cities. We review the mostly absentee planning literature related to public schools and neighborhood development and provide a brief econometric case study that concludes although Philadelphia is a school quality ‘desert’, good schools still fetch a premium and great schools have the power to transform a neighborhood.

Finally, these results are used to motivate a new neighborhood intervention – School Improvement Districts. An extension of the traditional Improvement District framework, School Improvement Districts would allow local residents to vote to increase their local tax rate and put the incremental difference in tax revenues toward the local school. Because our case studies show that the new school quality will be capitalized into local home prices, we discuss how these Districts must be accompanied by a series of equity interventions that will encourage housing affordability and limit residential displacement. The most important means to achieve this equity, we argue, is to draw the District boundary to encompass a mixed-income neighborhood which would give planners greater control over the supply of and demand for public goods like schools.

References

MIX AND MATCH: DOES HOUSING MIX AFFECT RESIDENTIAL LOCATION CHOICE?

Abstract Index #: 258
Abstract System ID#: 494
Individual Paper

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Policies aimed at improving the diversity of dwelling types represented in the residential stock have enjoyed widespread support in the planning community. In particular, policymakers aligning with the Smart Growth movement have advocated for improving housing mix, suggesting that neighborhoods with a greater diversity and distribution of housing types – such as townhomes, multifamily units and secondary suites, in addition to single family homes - enable a broader spectrum of the population to live in the community of their choice (Levine and Inam 2004; Talen and Knaap 2003). Improving residential matching opportunities may be particularly important for households with Smart Growth preferences, since residing in communities with Smart Growth characteristics has been linked to numerous social, environmental, and economic benefits compared to residing in more suburban residential environments (Burchell et al. 2002; Newman and Kenworthy 1999; Frumkin, Frank, and Jackson 2004) and because Smart Growth neighbourhoods are increasingly in demand (Nelson 2013; Leinberger 2008). However, few empirical studies have investigated whether a greater mix of housing types successfully enables households to settle in the community of their choice. This paper presents results from a doctoral dissertation aimed at uncovering the association between the degree of neighborhood housing mix and the ability for households with preferences for Smart Growth neighborhoods to reside in these communities. These relationships are tested using data obtained from a household survey of 1,186 residents of Greater Vancouver, Canada. It is anticipated that the final results from this dissertation will make significant contributions to policy and research aimed at encouraging Smart Growth development and housing diversity.
DO QUALIFIED ALLOCATION PLANS SHAPE SITING PATTERNS OF LIHTC DEVELOPMENTS?

Abstract Index #: 259

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Recent research has examined the siting patterns of Low Income Housing Tax Credit (LIHTC) developments, but the reality is that the LIHTC program is not one uniform, national program. Rather, the program is administered by state allocating agencies, each of which has considerable discretion about how to allocate tax credits. In particular, each state issues a Qualified Allocation Plan (QAP), which outlines the selection criteria the state will use when awarding its nine percent tax credits. Some criteria are required by the federal government, such as setting aside at least 10 percent of credits for nonprofit developers and using the minimum amount of tax credit financing feasible. States are also allowed to adopt additional criteria, however, that further the state’s housing policy and other goals, such as providing set-asides for developments with existing housing subsidies, such as the HOPE VI Program, or awarding bonus points for locating developments in particular types of neighborhoods. As the competition for credits has increased, it seems likely that these criteria play a greater role in shaping where tax credit developments are built.

QAP features vary considerably across states and often change radically within a state over time. This analysis examines whether and how the features of QAPs shape siting patterns of tax credit developments. In particular, we study changes in the location criteria outlined in QAPs for 21 different states across the country between 2002 and 2010 and observe whether and how those modifications are associated with changes in the poverty rates of the neighborhoods where developments awarded tax credits are located.

We focus on five major categories of priorities states use to decide on how to allocate their credits: (1) high-opportunity neighborhoods, (2) proximity to amenities, (3) approval by the community, (4) furthering investment in blighted neighborhoods, and (5) avoiding concentrations of affordable housing. These categories were chosen because they appeared—in some form—in most of the states we reviewed. Furthermore, we expect all of these criteria to be correlated with neighborhood attributes and to thereby affect a developer’s decision about where to propose and build a project.

We rely on a series of different neighborhood poverty measures to describe siting patterns. First, we calculate the change in the share of LIHTC units allocated that are located in high-poverty neighborhoods (those census tracts with poverty rates greater than 30 percent) as well as the change in the share allocated in low-poverty neighborhoods (those census tracts with poverty rates of less than 10 percent). We also calculate the change in the exposure to poverty of the allocated tax credit units during our study period, using the exposure index. The exposure index captures the extent to which units in developments allocated tax credits are located in census tracts with poor individuals. This measure captures the tract poverty rate of the average unit in a development allocated tax credits in each state. Rather than focusing on the share of developments in each neighborhood
Overall we find evidence suggesting that QAPs matter. Even with a small sample size of 21 states we find statistically significant relationships between changes in QAPs and the locations of tax credit allocations. We find that overall states which increased priorities towards higher opportunity areas exhibited increases in the share of tax credits allocated for projects in low poverty areas, decreases in the share of tax credits allocated for projects in high poverty areas as well as decreases in the overall exposure to poverty of projects allocated tax credits.

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Abstract Index #: 260

HOUSING AND THE GRASSROOTS: USING LOCAL AND EXPERT KNOWLEDGE TO PRESERVE AFFORDABLE HOUSING

In cities with rapid population growth in the urban core, many neighborhoods that have been home to low-income communities of color for decades have experienced rapid acceleration in high-end residential and retail development. One consequence of this redevelopment has been that, nationwide, hundreds of thousands of previously-subsidized affordable housing units have been lost due to opt-out, sale or demolition (Schwartz 2014). Several jurisdictions have begun to track the subsidy expiration of these units and offered incentives for their preservation through the Low Income Housing Tax Credit and other federal funds (Reina & Williams 2012). However, intervening into the market process of opt-out, sale and conversion remains challenging.

Washington, DC, organizers and affordable housing advocates have effectively used quantitative and qualitative housing data to prevent the loss subsidized, rent stabilized and market-affordable housing in gentrifying neighborhoods through the DC Preservation Network (DCPN). Initially created in 2007 through partnership between the National Low Income Housing Coalition, the Urban Institute and the local Coalition for Nonprofit Housing and Economic Development (CNHED), the DCPN expanded a database of subsidized units in the District, categorized by the degree of risk of losing the subsidy attached to the building. The network is comprised of tenant organizers, foundations, nonprofit developers, City and federal agency staff, and policy advocates who meet monthly and discuss preservation at the building level. In addition to the quantitative data about the subsidies, inspection scores, addresses, and number of units, the network collects significant qualitative data from all members. The qualitative data collected includes information about opt-outs, conditions and sale from tenants, and information from foundations and agency staff about affordability covenants, enforcement, and funding. This data is documented in continuous and updated narratives about each building maintained by DCPN and the Urban Institute. This data has enabled groups from the grassroots to HUD to act more effectively and quickly to assert rights, enforce laws, provide legal support, or approve funding for preservation.
Many preservation efforts have relied on well-intended top-down efforts of foundations, nonprofit developers and agency staff to select and preserve buildings for preservation. Washington, DC offers an important example of the ways in which the preservation effort has been led from the grassroots, in line with Sandercock’s (1998) broadening of the field to one that encompasses “planning from below.” She contends that this redefinition can “create the possibility of a far more inclusive set of narratives, embracing... communities who have all, in response to their exclusion from mainstream planning, developed counterplanning traditions of self-help, community solidarity, and community organizing for social and economic development” (pp. 9-10). This paper argues that DCPN is effective because it offers a space of translation between traditional “expert” knowledge of government agencies and “local” knowledge of tenants and grassroots organizers and uses a mix of qualitative methods which allow the planner to hear the voices of residents and understand the everyday experiences of spaces (Holston 1995). By developing this space, these groups have co-produced knowledge to not only preserve buildings on a case-by-case basis, but ultimately to create and advocate for a preservation strategy for the District.

Using in-depth interviews, direct and participant observation, and archival data, this paper examines the case of the DCPN and the part traditional planning experts and grassroots organizers have played in the effort to preserve affordable units in the District of Columbia. This paper also analyzes the challenges to this model for tenants, the City, and the nonprofits involved. Finally, this paper discusses the larger implications for planning and policy in the changing affordable housing landscape.

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This paper primarily focuses on three questions:

1. Whether voucher location outcome is associated with the combined effect of preferences and constraints?
2. Whether voucher locational outcome is associated with housing search strategy? And
3. To what extent do location choice factors, such as preference, search strategy, voucher subgroups, and constraints, affect voucher locational outcome.

The research will use primary data collected through survey between 2013 and 2014. The first and second research questions are addressed through categorizing the combined effect of preferences and constraints, as well as housing search strategies. The ANOVA analysis will be conducted to examine locational differences measured by suitability scores across aforementioned categories. The third research question will be addressed through conducting regression analysis to identify determinants of voucher locational outcomes. The study area is Duval County, Florida, a rapidly growing county known for its low density, suburban-style development. Compared to the earlier studies focusing on evaluation of the HCVP in denser urban areas, a study in the context of newer Sunbelt metropolitan area offers a valuable alternative lens to understand HCV location patterns.

This research intends to add to the literature on evaluation of HCVP by linking locational outcome with housing choice determinants through econometric modeling. Findings of this research intend to provide quantitative and statistically demonstrated evidences to policymakers who make policy adjustments/interventions accordingly.

References


Abstract Index #: 262
THE G WORD: WHAT DO WE MEAN WHEN WE TALK ABOUT GENTRIFICATION?
Abstract System ID#: 509
Individual Paper

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Gentrification, one of the most politically-loaded terms in the urban studies literature, has arguably become the dominant urban issue for academics, planners, and activists (Davidson & Lees, 2010). From the ‘modest mews’ ‘invaded by the middle-classes’ as described by Glass (1964), gentrification has come to encompass a plethora of neighborhood change processes in countless contexts. Despite the significant attention it has received, however, there exists little to no consensus on what, exactly, constitutes gentrification. For many, it is synonymous with the displacement of lower- or working-class residents by a more well-to-do cohort; however, the term has come to encompass neighborhood change that does not displace residents, such as investments in previously-industrial districts. Further, because gentrification is so closely associated with displacement – and the hardships engendered by it – the term has become a rallying point for activists and academics seeking to halt its expansion (Slater, 2006).

Given these controversies, scholars have proposed a variety of new terms to better encompass the breadth of contemporary upward urban neighborhood change processes, including redevelopment, regeneration, reurbanisation, and revitalization, among many others. In addition to describing a wider variety of phenomena, these terms lack the negative political connotations of gentrification and hope to move beyond the political and
activist struggles associated with the term to a more holistic and balanced debate of the change processes (Haase et al., 2010; Scott, 2011).

This paper frames debates and discourse about neighborhood change nomenclature by examining the literature to understand what scholars mean when they use gentrification and similar concepts to describe upward urban neighborhood change. It develops a typology of neighborhood change which (i) identifies the contexts, processes, and patterns associated with each term; (ii) describes the consequences related to both resident displacement and the built and natural environments; and (iii) surveys the moral judgments and political arguments associated with each term. While the paper will likely not settle debates on defining gentrification, it will provide a synthesis of the literature valuable to academics, planners, and activists.

References


THE EFFICACY OF LOCAL COMPREHENSIVE PLANS ON HOUSING AFFORDABILITY

Local comprehensive plans are critical in guiding sufficient housing supply for all residents, including low-income households. Despite extensive studies in plan quality analysis, few studies have examined the efficacy of local comprehensive plans on community outcomes. As far as I recognize, Aurand’s study (2014) is the only study directly testing the relationship between housing requirements in local comprehensive plans and affordability outcomes. The major finding of Aurand’s study (2014) is that the strength of local comprehensive plans toward affordable housing is positively related to the enhancement in affordability for low-income households in Florida. However, localities in other states may have different dynamics from those in Florida. In particular, Michigan is a state located in the rustbelt region and has economically struggled, thereby suggesting that housing affordability may have been more neglected. According to Harvard Joint Center for Housing Studies (2013), Michigan is one of the states that have the most severe housing affordability burdens.

This study aims at examining the relationship between the strength of local comprehensive plans toward affordable housing in the Detroit metropolitan area (MA), MI and subsequent changes in housing affordability for low-income households between 2000 and 2010. The strength of local comprehensive plans toward housing affordability will be evaluated by counting the number of plan policies linked to affordable housing for low-income households (e.g., community land trust and community development block grant) for the 92 municipalities that have more than 10,000 residents as of 2000. The efficacy of local comprehensive plans on housing affordability will be examined by running a regression analysis between the strength of local comprehensive plans toward housing affordability and subsequent changes in the share of housing cost burdened households and affordable rental units. Given that there are limited studies on the efficacy of local comprehensive plans on community outcomes, this study will significantly contribute to the literature.

References

As the nation faces dramatic demographic shifts at the same time of economic hardship and sluggish recovery, the Millennial Generation is gaining increasing attention. That is not merely due to their sheer size of population, which makes them the largest generation in American history. It is rather the distinctive view and behavior of this birth cohort that makes people think that the Millennials will reshape many parts of our economy and society, including the urban landscape. Some, for example Florida (2010), argue that the new generation values home and car ownership less and emphasizes more the flow of ideas and communication, which leads them to prefer living in cities. Finding more young hipsters in downtown apartments, bars, and streets, and a rising local population total, some people even declare the comeback of the urban cores. Others express concerns about the Millennials’ delays in household formation and homeownership in the recession and recovery, as the current housing setbacks may lead to persistent effects on their whole housing career (Furman, 2014). The distinctive characteristics of this generation might simply reflect the young adults’ responses to the economic crisis. It may also be a continuation of a previous long-term trend, which may be accelerated during the recession and recovery. Some of the Millennials’ impacts may be city-wide and not just focused downtown, because the Millennials are so numerous. Or these effects might only be expressed through subgroups such as the most highly educated. What is needed is a more systematic overview of the growth of key groups in different locations.

Using the most comprehensive and detailed information on the Millennials and young adults provided by the decennial Census and American Community Survey, both in summary tables and public use microdata files (PUMS), this paper documents the demographic changes that U.S. cities have experienced in the last five decades by distance from the city center in the 50 largest metropolitan areas. To examine whether the Millennials have led the rebirth and growth of downtown, this research investigates the living arrangements and geographic location of young adults age 25 to 34, using the ring analysis followed in the Census Bureau’s special report (2012). Analyzing the patterns by their socio-economic characteristics, such as race/ethnicity, education, and tenure status, enables us to understand more comprehensively the most diverse generation in the nation’s history.

The results of the analyses indicate that the city cores have not witnessed the comeback of the urban cores for total population but only for young population within 7.5 miles of the city centers, in both absolute and relative terms. However, there have also been substantial population and household growth of the 25-34 population in suburban areas between 20 and 40 miles, where the total population growth has been the greatest as well. By looking into the growth of the Millennials by their educational attainment, the paper finds that it is the young adults with bachelor or higher degrees who have driven the growth of the urban cores, while the ones with lower educational attainment have been found more often in the suburban areas. Yet, the housing stock analysis suggests that the young adults’ movement towards urban cores have occurred though replacing older-aged and moderate income tenants, sometimes in the forms of gentrification, not by new construction of rental or owner-
occupied housing units. The analysis also finds much stronger evidence of downtown concentration in northeastern and Midwestern metros than in the south or west.

References

Abstract Index #: 265
WALKABILITY AND SUBSIDIZED HOUSING IN SHRINKING U.S. CITIES: ASSESSING NEIGHBORHOOD ACCESSIBILITY OF SUBSIDIZED HOUSING
Abstract System ID#: 520
Individual Paper

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It has been well established that access to opportunities or resources is one of the essential components of subsidized housing policy (Talen and Koschinsky, 2014). Access to opportunities promotes economic and social mobility and healthy lifestyles. Siting affordable housing in sustainable neighborhoods that are walkable and accessible to services and facilities can be especially important for low income residents who may be more affected by physical proximity and rely more on the neighborhood and community-based resources than other income level residents. As stated by Schwartz (2011), however, “the literature on sustainability and housing has paid little attention to low-income or to subsidized housing” and “[v]ery little attention had been paid to the connection between subsidized housing and environmental sustainability” (p29). Using Walkscore data at the census block group level, Talen and Koschinsky (2014) found that a high percentage of the federally subsidized housing is in poor-access locations in six metropolitan areas, with over 90% in Atlanta and Phoenix.

This study contributes to the discussion of subsidized housing and sustainable neighborhoods by adding another dimension—considering the unique characteristics of cities and regions experiencing population decline and by using a finer spatial scale. Past research suggests that development in shrinking cities occurs in a different context than in cities and regions experiencing growth (Silverman et al. 2013). Shrinking cities are among the most distressed in the US and face acute levels of poverty, fiscal stress, and institutional constraints. It is critical to understand the neighborhood context of subsidized housing in these cities in order to help identify neighborhoods of opportunity for targeted subsidized development that promotes sustainable affordable housing. This project examines the neighborhood context of subsidized housing with respect to accessibility and walkability in shrinking rust belt cities.

Among Walkscore’s top 10 picks for affordable and walkable American cities (Walkscore, 2014), three of them are on the list of the top 10 metropolitan areas in the U.S. with the fastest declining population between 1980 and 2010 (Frey, 2012). These cities are Buffalo, NY, Pittsburgh, PA, and Cleveland, OH. This study included all three cities, in addition to another rust belt city, Detroit, MI as our case study areas. Two measures for walkability were used including walk score and walkability index. Data collected for the walkability analysis include walk
scores at the census block level collected from Walkscore, retail walking destinations, service walking destinations, cultural and educational walking destinations, parks, streets, bus and transit stations, and census data from a variety of sources. Walkability indices are constructed based on these destinations and variables that reflect street connectivity and population density, as suggested by the literature (Duncan et al., 2011; Yin, 2013). Both walk scores and a walkability indexes are used to assess neighborhood walkability and accessibility. Following Talen and Koschinsky (2014), both descriptive statistics and regression models will be used to examine the level of neighborhood access for subsidized housing, and to test the relationship between high percentage of subsidized housing with different accessibility levels and different indicators of neighborhood quality such as crime.

The results from this study can help planners and funding agencies to understand how to achieve neighborhood access for low income residents to support the development of sustainable affordable housing and evaluate affordable housing outcomes. They can also help to create a framework for comparative analysis of affordable housing outcomes in cities and regions experiencing variable levels of economic development and growth to help our understanding of the relationship between local and regional conditions on housing outcomes and assist all regions in adapting their affordable housing strategies as local economic conditions change over time.

References
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THE INTRA-URBAN DYNAMICS OF CHINA’S HOUSING BOOM: A CASE STUDY OF CHENGDU, SICHUAN

China’s property market has been the subject of a flood of media coverage in recent years. Rapid price increases for residential property and the possibility of a price bubble in many cities has led the central government to take a myriad of regulatory measures to cool housing markets. Yet, scholarly attention has focused either on inter-city analyses or case studies of the high-GDP coastal cities like Shanghai and Beijing, and too little is known about the property market dynamics of more typical Chinese cities. Chengdu, the capital of Sichuan province, is not among the extremely high priced cities nor has it seen bubble-like price increases, thus is taken as an average city. Using a comprehensive set of georeferenced housing transactions, joined with remote sensing data, and data on neighborhood amenities and transportation infrastructure, this paper analyzes the spatial dynamics of the Chengdu housing market from 2004 to 2011. During this time period the real sales price of an average apartment increased by more than 40 percent, but simple descriptions obscure major changes in the housing stock. Findings highlight the shift to a bimodal distribution of prices and unit sizes, a growing premium placed on larger units, and a complex relationship between price and the proximity to the city center. These unpredicted features of the market are linked to government intervention. Moreover, a lower price for units developed by state-owned-
enterprise developers is also found, indicating a low efficiency and profitability for state-owned-enterprises compared with private firms.

References


Abstract Index #: 267

THE EFFECT OF THE GREAT RECESSION ON RENTAL HOUSING AFFORDABILITY

Abstract System ID#: 533
Individual Paper

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The Great Recession was a substantial upheaval for Americans across the income spectrum. Those with housing equity were particularly hard-hit, and the declines in housing wealth have been well-documented. What is less discussed are the effects on those that rented their homes, who on average experienced declines in income due to reduced employment opportunities. Further, in many markets, the foreclosure and credit crises contributed to increased demand for rental housing, as foreclosed homeowners began to rent and fewer households became homeowners due to tight credit and labor markets. In these cases, renters had more competition for procuring rental housing and less money to do so.

This paper analyzes the changes to rental markets during and after the Great Recession in the United States. Specifically, I examine the extent to which rental housing became less affordable for Extremely Low-Income (ELI) households. I document changes in housing subsidy demand during this time period, then examine how the supply of housing subsidies kept pace with these demand changes. I then run regression models to determine what metropolitan area housing market and economic characteristics are most strongly associated with larger affordability gaps before and after the Great Recession.

Nationwide, it is clear that rental affordability gaps became more pronounced during the Great Recession. In 68% of counties and 69% of MSAs in my sample, there was an increase from 2007 to 2010 in the number of ELI households per affordable rental unit. Across the country, the increase was 11% in the MSA sample and 17% in the county sample, which are dramatic increases for only a 3-year period.

Not surprisingly, the data show wide variation across MSAs and counties in housing affordability gaps. Controlling for area median income, urban areas in the South have higher numbers of ELI households per affordable rental unit. The areas with the largest increases during the recession are a bit more idiosyncratic – affordability problems were exacerbated in all areas of the country, and these changes were slightly more substantial in the West and South.

Preliminary models suggest that declines in the public housing stock are associated with increased affordability problems during the recession. High-cost loan and foreclosure rates have a weakly significant connection to rental housing affordability increases during the recession.
A QUADRUPLE BOTTOM LINE FRAMEWORK FOR COMMUNITY ECONOMIC DEVELOPMENT

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The proposed paper will provide a conceptual framework and empirically-based case study for clarifying and categorizing four inter-related outcomes of community economic development: economic development, social equity, environmental sustainability, and creative cultural vitality. This perspective extends the triple bottom line approach that focuses on developing projects that simultaneously yield economic, social, and environmental benefits. Several researchers argue that creative individuals and industries increasingly drive regional economic growth as part of global restructuring (Florida 2005; Scott 2004); cultural vitality is an under-emphasized yet measurable asset and process of community development (Jackson et al 2006); and that the impact of artistic clusters is often place-specific as well as under-estimated (Grodach et al 2014). However, few studies examine cultural creativity in the comparative context of economic, social, and environmental development. The proposed paper contributes to existing literature by addressing the question of whether a creative cultural vitality outcome is conceptually and empirically distinct from economic, social, and environmental outcomes. The paper will provide a case analysis of the quadruple bottom line framework by examining three different community economic development projects in Seattle. The case analyses will highlight the emergence of a quadruple bottom line policy framework as well as will examine the trade-offs associated with quadruple bottom line community economic development. Case data—collected annually between 2005 and 2014 by graduate researchers in a Community Economic Development course at the University of Washington—include field studies, key informant interviews, documents review, and photo and video documentaries. The paper will discuss the implications of a quadruple bottom line approach for researchers and practitioners of community economic development.

References

IN SEARCH OF LOCATION-AFFORDABLE HOUSING: CHALLENGES FACED BY VOUCHER PROGRAM PARTICIPANTS

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As a percentage of their income, low-income households have the most to gain from the transportation cost savings of location efficient housing. In a tight housing market, however, low-income renters have limited choices about where to live. The Housing Choice Voucher Program is designed to provide low-income households with choice by helping cover the gap between affordable and market rate rents, which should increase opportunities for securing location efficient housing.
But how effective is this program at providing access to location efficient housing in tight housing markets with high demand for walkable, service-rich, transit-accessible, urban housing locations? In this paper we address this question through an examination of the pre and post-move location efficiency of more than 2,000 voucher recipients who moved in the Portland, Oregon region during 2012 and 2013. During this time residential rental vacancy rates ranged from 3% to 4%, less than half the national average.

Pre and post-move addresses were obtained from three housing authorities in the region. Each before-after address pair was then geo-coded and paired with block group level data from the EPA’s Smart Location Database. In order to test the impact of demand for urban housing, movers were split into two categories, depending on whether they were located in urban or suburban jurisdictions. Differences were tested in overall pre and post-move location efficiency and in relative change between movers in urban and suburban areas.

Preliminary results indicate that urban voucher recipients are moving to block groups that are significantly less location efficient than their previous homes with regard to urban form, transit service frequency/proximity and employment density. Meanwhile, suburban voucher holders’ location efficiency remained stable. Urban voucher recipients continued to live in more location efficient areas than suburban voucher recipients, but moving narrowed this gap.

These outcomes occurred despite policies implemented by an innovative urban Moving to Work housing authority to promote greater choice by voucher recipients, including higher payment standards for low-poverty, high-rent areas and the flexibility of allotting up to 70% of income for housing costs. At the time, Oregon landlords were not required to accept vouchers, a policy that changed effective July 2014.

Our findings serves as a cautionary tale about how, in some tight housing markets where demand for urban housing is on the rise, housing vouchers are not able to overcome market forces and retain location efficient housing options for those who need them most. These findings will be explored within the context of potential regional policy solutions that both include and go beyond what housing authorities can accomplish alone.

References

This event is sponsored by International Association for China Planning (IACP)

This roundtable will discuss housing and community transformation of post-reform China in the last three decades. It sheds light upon the transformation, reconfiguration, and reconstruction of housing, communities, and social space in rapidly urbanizing China. Since late 1970s, along with market-led reform and open door policies, three forces of marketization, globalization, and urbanization have been reshaping Chinese cities. China has achieved a remarkable success as its economy stands as the second largest of the global, only after the US. Unprecedented economic, social, cultural and political changes have been widely identified. Specially, along with social stratification, spatial differentiation, as well as the social and spatial mobility of urbanites, rural migrants, and even foreign settlers, we have witnessed the shifting and sorting of Chinese into various houses and communities: villas, commodity housing estates, communities of public housing, social/affordable housing, and urbanized villages. As China enters a new stage of ‘slower’ development, it is time for us to summarize the mechanism of urban changes for China during the last three decades, especially at the meso or micro level. Therefore, it is important to record, interrogate and theorize everyday practices of her urbanism, to articulate her actually existed urbanization, and to examine the restless transformation of communities and housing in China.

This panel brings a holistic understanding of housing and community transformation during China’s rapid urbanization. It demands further theoretical and empirical efforts to deepen our understanding of housing and community changes. It encourages further interdisciplinary exchanges among geography, planning, sociology, anthropology, politics, and so on.

The panel will be moderated by Dr. Lan Deng, University of Michigan. The panelists and their specific topics are as follows:

Dr. Zhigang Li, Sun Yat-Sen University: Assemblage, entrepreneurial suburbanism, and the restless (re)making of suburbia in China
Dr. Lingyun Fan, Suzhou University of Science and Technology: Evolution process and mechanism of rural social space in Suzhou
Dr. Zhilin Liu, Tsinghua University: Social capital building as an informal process of social cohesion for marginalized population in China
Dr. Yang Xiao, Tongji University: An assessment of urban park access in Shanghai – implications for social equity of marginalized groups in urban China
Dr. Yuan Yuan, Sun Yat-Sen University: Collaborative mechanism in urban planning of low-income communities

Abstract Index #: 271
RE-FRAMING NARRATIVES OF DECLINE WITH GIS
Abstract System ID#: 571
Poster

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Local municipalities often construct narratives of decline to describe neighborhoods targeted for redevelopment and revitalization that can obscure how local residents themselves feel and think about, as well as use, their neighborhoods. This can lead to ineffective strategies, or perhaps worse, strategies that exclude and harm the very population meant to benefit the most. In this paper, I argue that qualitative GIS is particularly useful in constructing alternative narratives of neighborhoods that can reflect a more localized, nuanced, and asset-based approach. The basis for this argument comes from a modified version of feminist standpoint theory, which argues that knowledge is constructed from individual standpoints or “combinations of resources available within a specific context” and thus always “partial, local, and historically specific” (Sprague, 2005, p. 41). The use of this epistemological base facilitates the argument that there is no one true narrative of what a neighborhood is, but rather multiple and perhaps conflicting representations. To demonstrate my argument, I provide a case study of my own neighborhood in Arlington, Texas that is in the beginning stages of plans for redevelopment. I use my specialized knowledge as a PhD student in urban planning to construct visual representations using GIS of how
the city might see my neighborhood and contrast these with visual representations of how I see my neighborhood as a local resident.

References


Abstract Index #: 272

MILLENNIALS IN GENTRIFICATION: CINCINNATI’S OVER-THE-RHINE (OTR) IN THE MILLENNIUM

Abstract System ID#: 578
Poster

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The justification of inner city gentrification has been widely debated across the fields of planning and geography, with scholars such as Lance Freeman and Loretta Lees trying to appraise its complicated process and controversial outcomes (Freeman 2006; Lees 2000). Dowell Myers, a demographer and planner, informs us of the impending future of our cities to be impacted by a surging population of millennials – those who were born in between 1981 and 1997 – in these areas (Myers 2014). However, the scholarly works in the fields have not specifically addressed the issue of inner city gentrification with regard to the actual and likely impact from this emerging demographic cohort, along with the facilitating functions of city government and institutions (Mossberger and Stoker 2001). My paper addresses the issue of inner city gentrification with special attention to the role and motivations of millennial residents and the facilitating efforts from city government and institutions to cement their sustained residences. Specifically, in my project, I will be looking at the millennials who moved in Over-the-Rhine (OTR), Cincinnati after 2000, in order to investigate their role and motivations in the process of gentrification. I will discuss these in line with the project and policy initiatives from the city government and local institutions in order to reveal the dynamics between them and the residents in the process. OTR, a historic neighborhood adjacent to the downtown Cincinnati, has experienced accelerating gentrification based on a number of real estate development and financing projects particularly after the riots in 2001 and the subsequent establishment of Cincinnati Center City Development Corporation (3CDC) in 2003. I argue that the millennials who moved in OTR since the early 2000s may have played a major role in accelerating the gentrification of neighborhood, looking for an affordable urban lifestyle with job/business opportunities while helping strengthen the “revitalized” sense of community by actively participating community engagement programs. While the city government has exercised the typical economic and community development strategies in the downtown such as tax breaks for the major corporation branches/headquarters and large-scale construction of amenities (e.g., renovated stadiums), private non-profit organizations like 3CDC whose board of directors is primarily composed of personnel from the major corporations like Proctor & Gamble (P&G) would have made more specialized efforts to attract and retain young talents in the area, by facilitating the transformation of OTR into a more favorable place for the millennials to live and sustain their residences. In conclusion, this project, by closely examining the role and motivations of the millennial residents in OTR, Cincinnati in the process of neighborhood gentrification, sheds new light on the rarely acknowledged issue of inner city gentrification in regard to the surging population cohort and the major stakeholders/facilitators in the city, all of whom are much responsible for the impending future of our cities. [465 words]

*This research was undertaken independent of collaboration or supervision with a faculty member.

References

EXPLORING THE NEIGHBORHOOD REDEVELOPMENT EFFECTS ON RESIDENTIAL PROPERTY VALUES:

Abstract Index #: 273
Abstract System ID#: 595
Individual Paper

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Background: Urban sprawl has accelerated the decline of inner cities. It has also shown to be linked with the prevalence of auto-dependent, sedentary lifestyles and obesity (Ewing et al., 2008), accompanying serious economic, social, and health burdens. Many planning movements and initiatives have been attempted to reverse this trend, and Tax Increment Financing (TIF) is one of the most common urban redevelopment approaches used by local governments. While recent studies identified the significant association between TIF developments and residential property values, their causal relationship has not been clearly examined.

Objectives: This study developed a quasi-experimental design to establish causal inference between TIF effects and Single-Family (SF) property values, while sweeping out the price effects of time-constant omitted variables. Pre-crisis (2008) and post-crisis (2014) appraised values were utilized to minimize the impact of financial crisis in assessing potential property appreciation. Analyzing the six-year difference of 8,567 SF home property values in 12 TIF districts and their corresponding comparison neighborhoods in the City of Dallas, Texas, this study investigates the following aims: (1) Are there significant TIF effects associated with SF property values? (2) Are SF homes located in TIF districts valued more than those in comparison neighborhoods? (3) If yes, is it because of the built environmental improvements facilitated by TIF designation, or the residential locations retaining the premiums?

Method: This study first identified appropriate comparison neighborhoods for the 12 TIF districts selected for this study, based on socioeconomic status, land use pattern, area/size, and location. Following the propensity score matching (PSM) method and GIS analysis, one to several Census block groups were identified to have suitable matches. Each SF home in TIF districts was matched with the most “identical” one in comparison neighborhoods. Then, by adopting Average Treatment Effects (ATE) method, the difference in mean property values between the treatment group and the control group was assessed as the “true” impact of TIF designation on property values during the six-year period. A binary logit model, PSM, two-way ANOVA, and ATE analysis were conducted to address the three proposed research aims.

Results: The average value appreciation from 2008 to 2014 for SF homes in TIF districts and comparison neighborhoods were $30,026 and -$9624. For Aim 1, the binary logit model indicated higher property values were significantly associated with the SF homes located in TIF districts; For Aim 2, the ATE was estimated to be $37,000. That is, after controlling building attributes and residential locations, the value appreciation of SF homes in TIF was $37,000 more than their counterparts in comparison neighborhoods. For Aim 3, the value appreciation attributable to residential locations and building attributes was shown to be much smaller than the TIF-related value appreciation ($2,650 compared to $37,000).

Conclusion: Existing evidence on the economic benefits of TIF has been inconsistent. This case-comparison study adds to this body of literature by providing new evidence of causality validity to support the significant role of TIFs in increasing SF property values. The key question is how to apply this tool appropriately to the neighborhoods where the need is greatest. There are arguments that TIF is somewhat overused and has become associated with political favoritism. The spillover effects burden the public services in nearby neighborhoods without reimbursement, while the redevelopment itself drives out lower-income people leading to gentrification. However, in the current era of economic uncertainty and fiscal constraints, TIF is still a powerful tool to deliver a
stronger local economic future, while improving the built environments to promote active living and sustainable communities for urban residents.

References


Abstract Index #: 274

FOUNDATIONS IN THE DRIVER’S SEAT: WHAT WE LEARN FROM DETROIT ABOUT COMMUNITY PARTICIPATION WHEN THE THIRD SECTOR DRIVES PLANNING PROCESSES

Abstract System ID#: 597
Pre-organized Session: Learning from Detroit

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Detroit is one of a growing number of previously industrial cities globally that is using visioning and strategic land use planning through collaborative governance to steer in a new direction. Research on collaborative governance has found successful approaches ranging from governmentally directed community planning efforts (Sirianni 2009) to successful community-government partnerships such as the Nagasaki Model (Yahagi 2014). Detroit - edging toward bankruptcy proceedings and exhibiting weakened governmental capacity at the start of its collaborative planning effort - presents a unique case study to understand collaborative planning without an able public partner. Building on Ansell and Gash (2007), this paper argues that an imbalance in the power of stakeholders undermines collaborative governance. In the case of Detroit collaborative strategic land use planning, community nonprofits can be expected to see diminished voice in the collaboration when the public sector fails to play a strong mediating role.

In the absence of a strong public partner, this paper details the rise of the Third Sector in Detroit downtown and community planning and its emergence as lead authority in a comprehensive Detroit strategic land use plan. From the creation of a 501(c)(3) within the city’s primary public benefits corporation (PBC) to receive philanthropic funding, to the governance framework for Detroit Future City, the paper describes the institutionalization of national, regional and local philanthropies in Detroit planning processes. Philanthropic collaboratives, informal networking and public-private hybrid agencies are assessed for their role in changing land use planning governance. The paper focuses on the leadership role that several dominant foundations played in Detroit Works Project/Detroit Future City agenda-setting, decision making and implementation. Finally, it asks what impact the ascendance of the Philanthropic Sector in planning has on the participation of community residents and community nonprofit organizations. It argues that we learn from Detroit what to expect when the public role in land use planning is diminished.

References

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Planners need to understand what impacts housing choice because these decisions affect access to various opportunities. As Tiebout (1956) theorized, neighborhoods offer a bundle of public goods (e.g., access to public transportation, parks, police); people move to neighborhoods that match not only their preferred public goods, but also the taxes that they are willing to pay.

Schools may then serve as an important factor when families decide to move. Educational opportunities are particularly important because of the geographical disparities in school quality. While schools can be considered a public good because all children attend and their attendance does not preclude others from attending, high-performance schools are partial public goods because they are typically located in neighborhoods with high housing costs. Thus, only some parents can afford to live in these districts and send their children to these schools. However, there also may be racial or ethnic differences in how much they are willing to pay for high-quality schools.

My project seeks to answer if Californian Asian American parents pay more for housing relative to their income to live in neighborhoods with high-performance schools. It builds on previous work (Ong, Patraporn, & Tran, 2013), which showed that a greater proportion of Asian Americans take on more housing burden. Also, Ogbu (1987) theorized that voluntary immigrants, of whom he including Asian Americans, connect school achievement to social mobility. I hypothesize that Asian American parents are willing to pay higher housing costs relative to their incomes to enable their children to enroll in high-performance schools. According to economic value theory, if a person prefers a particular good, the person is willing to use more of their income to obtain this good as a trade-off of other goods.

This paper uses secondary data analysis of California Department of Education Academic Performance Index (API) scores, American Community Survey, and Decennial Census data to estimate income, home value, and race/ethnic group data. Home Mortgage Disclosure Act (HMDA) data will also provide information on loans, loan performance, and racial background of borrowers by census tract. I will use ArcGIS to match census tract data with school districts. A regression model will be used to then determine any statistically significant relationships between racial/ethnic background and housing burden in high-performance school districts.

The findings will help understand if Asian Americans on average have lower incomes and greater housing burden than other groups in high-performance school districts. The study also has implications about the greater financial risk with more housing burden. Additionally, it will show spatial differences in housing burden and riskier loans in the state by racial/ethnic group. Finally, there are implications for wealth, as housing is the largest source of wealth for most racial minority groups (Taylor et al., 2009).

References
As the population of the Los Angeles area has grown and changed over the last several decades, its housing supply has become increasingly constrained. Housing opportunities have narrowed, especially for young people trying to enter the housing market. With limited housing options, first immigrants and then millennials have intensified the competition for housing in central urban neighborhoods and inner ring suburbs. The shifting patterns of where young people live have led to dramatic demographic and socioeconomic changes in neighborhoods across Los Angeles. In this paper I address the questions of how changes in the population and housing supply since 1990 have affected the affordability of quality housing and neighborhoods for young people in the Los Angeles area, and how young people have in turn transformed neighborhoods.

Los Angeles’ dynamic economy and laid back culture have had enduring appeal for diverse groups of people. During the 1990s, Los Angeles attracted substantial numbers of immigrants and baby boomers moving from other states. Millennials (children of immigrants and baby boomers alike) surged into the housing market in the past decade. At the same time, undeveloped land became scarce and financing for new construction dried up over the course of the housing boom and bust. Now Los Angeles faces strong demand for housing with an aging housing stock, stringent planning regulations, and deep opposition to new development.

I analyze changes in housing opportunities and outcomes for various demographic groups in Los Angeles County during the 1990s and 2000s. I define groups by educational attainment and age; race and ethnicity and age; and immigrant status and year of arrival, paying special attention to young adults and recent immigrants. I measure changes in the housing and neighborhood characteristics of opportunities and outcomes for each group, using 1990 and 2000 Decennial Census data and the 2005-07, 2008-10, and 2011-13 American Community Surveys. I then compare the housing opportunities and outcomes between groups and between time periods for each group.

Further, I develop a new method to measure housing opportunities separately from housing outcomes. I distinguish opportunities from outcomes because opportunities are largely determined by factors external to a household, while outcomes are determined by household choices made within the structure of the housing market. I define housing opportunities as housing available on the market that has not been claimed by higher income households. Available housing depends on new construction as well as previous residents’ decisions to move. Within the supply of available housing, opportunities are affected by competition between households. By contrast, housing outcomes depend on actual choices of neighborhoods and housing units, as well as decisions about household formation, residential mobility, migration, tenure, and housing affordability levels. Outcomes may not match opportunities because people may decide to spend more of their income to compete for better housing. Alternatively, people may decide to double up or move out of the area altogether if they cannot afford housing that meets their needs. Measuring opportunities separately from outcomes gives a sense of the limited options people have and the compromises people make to afford housing.

This research provides planners with a detailed understanding of the interplay between demographic change and housing development. Los Angeles serves as a relevant example of the changes in population and housing that
have led to affordable housing shortages in many other large U.S. metropolitan areas. Because these trends began earlier in Los Angeles than most areas, it holds clues about the future of urban development. By understanding how these processes have reshaped the housing market in Los Angeles, planners can design better policies to alleviate affordable housing shortages and meet future housing needs.

References


Abstract Index #: 277
COMMUNITY FACTORS ASSOCIATED WITH UNMET HOUSING NEEDS OF OWNERS VS. RENTERS DURING DISASTER: CASE STUDY OF HURRICANES KATRINA AND RITA
Abstract System ID#: 645
Individual Paper

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Although housing needs prior to a disaster can exaggerate post-disaster housing needs, limited research has investigated housing needs throughout disaster phases. This study synthesized literature and provided a conceptual model for understanding unmet housing needs prior to, during, and after hurricane disasters. Measures of housing affordability, availability, and quality were significant in previous research examining housing needs during normal, non-disaster times. In addition, the model included disaster location and disaster phase to control for a disaster’s impact on housing needs. A unique feature of this analysis was to differentiate between homeowners and renters unmet housing needs.

The data regarding unmet housing needs, location, and time were obtained from the Texas 2-1-1 dataset of calls from August 1 throughout December 31, 2005. The 2-1-1 system is a 3-digit phone number similar to 9-1-1, but dedicated to non-emergency community needs. The 2-1-1 Texas Information and Referral Network has been used as a communication hub during disasters not only for routine community needs, but also for disaster-related needs and updating availability of social support services. These 2-1-1 data were collected from Texas’ 25 autonomous Area Information Centers. Of the total 2-1-1 calls (N=635,983) during the 5-month study period, 180,601 were housing-related, of which 59% were rental issues and 10% were owner-related. The individual 2-1-1 housing-related calls were aggregated by county (N=254 Texas counties) according to whether there were any calls in that county for unmet housing needs from homeowners and from renters during that disaster phase.

The independent measures of housing affordability, availability and quality were similar to previous research models using U.S. Census and Housing and Urban Development (HUD) public access databases, then aggregated to the county level. Disaster county location was determined by FEMA’s declaration of the Hurricane Rita disaster area in Texas. Four disaster phases were established: a) four weeks prior to Hurricane Katrina, b) three weeks during Hurricane Katrina landfall and sheltering, c) four weeks during evacuation, landfall and sheltering for Hurricane Rita, and d) three months recovery post-Hurricane Rita. The multivariate model was analyzed using logistic regression for each disaster phase for homeowners and for renters.
The findings indicated that housing affordability and availability factors had substantial impacts on the likelihood of homeowner and renter unmet housing needs, whereas housing quality showed no significant relationship throughout the disaster phases. For homeowners, housing market affordability barriers were significant prior to Hurricane Katrina, but not after the hurricane disasters began. For renters, increased affordability barriers were associated with greater unmet needs during all disaster phases except for the recovery phase. Hence, homeowners may have been better equipped to meet their housing needs or had greater access to disaster-related financial support programs than renters. Unmet housing needs of both owners and renters were significantly greater in larger urban areas during both hurricanes’ emergency phases. Unmet renters’ needs were greater in urban areas during recovery. Controlling for housing density throughout all disaster phases, a lower vacancy rate for housing units was significantly associated with greater unmet housing needs for both homeowners and renters. As expected, disaster areas had a greater likelihood of unmet housing needs for both owners and renters during Hurricane Rita.

Policymakers should understand that different factors relate to the unmet housing needs of owners compared to renters, and that these vary according to disaster phase. Consequently, different strategies and programs are needed during each disaster phase, and such programs should be targeted to renters differently than homeowner programs.

References

‘YOU’RE CLOSING A FAMILY DOWN’: CALLING OUT RELATIONAL TIES TO PROTEST SCHOOL CLOSURES IN PHILADELPHIA NEIGHBORHOODS

In this paper, I explore how local stakeholders situated schools within neighborhood social networks in protesting the closure of public schools in Philadelphia in 2013. In so doing, parents, students, teachers, and community leaders attested to schools’ local significance, revealing the ways schools are embedded in space through webs of local relationships. This place-rooted representation of schools sits in striking contrast to the aspatial surplus of seats invoked by officials in justifying school closures.

In December 2012, the School District of Philadelphia (SDP) recommended closing approximately one out of every six schools across the city. The District argued that the infrastructural contraction was a necessary piece in the larger puzzle of closing a gaping budget deficit. A 25% drop in enrollment between 2002 and 2012, due largely to charter school expansion and demographic shifts, left many traditional public schools severely under-enrolled. The costs of maintaining and heating half-empty buildings had become untenable, and SDP officials argued that in order to survive as a school district, they had to eliminate 53,000 “empty seats” across the city. However, framing the SDP’s facilities issue in terms of a surplus of seats obscures the spatial reality of schools. Schools are operated in buildings that sit in neighborhoods. A school’s location has bearing on who can attend
that school, and, in practice, culling thousands of “seats” involves closing specific schools that sit in specific neighborhoods, differentially affecting communities across the city.

In this paper, I examine the ways neighborhood stakeholders’ contestation of school closures rooted schools in local social landscapes. This research (1) traces the relationships between schools and local communities—relationships obscured by aspatial markets of seats (Witten, Kearns, Lewis, Coster, & McCreanor, 2003); (2) reveals schools to be embedded in the socially and politically contested neighborhoods where they sit (Deeds & Pattillo, 2014; Lipman & Haines, 2007); and (3) theorizes the leveraging of local community identities in broader political engagement and planning processes (Martin, 2003; Mele, 2000).

This paper’s findings sit within a larger dissertation project, in which I am studying the multiple ways local stakeholders in three Philadelphia neighborhoods invoked place-rooted arguments in contesting the proposed closure of public schools in their neighborhoods. Data collection consists primarily of in-depth, semi-structured interviews with neighborhood stakeholders, including parents, residents, teachers, community leaders, clergy, and local politicians. Additionally, I draw on video records of community meetings facilitated by the SDP between the December 2012 announcement of closure recommendations and the March 2013 final decisions.

Better understanding the politics that tether schools to local communities will help both school districts and residents navigate the restructuring of public school systems in ways that more equitably share the costs and consequences of those changes. My work contributes to theory in planning and geography that explores the production of place and the intersection of such processes with contested claims to urban space. This line of research also frames an arena for planning practice to engage the intersections of community development, neighborhood inequality, and public education.

References

Abstract Index #: 279

DOES INCLUSIONARY ZONING REDUCE SEGREGATION?

Large public housing projects have been found to contribute to the concentration of poverty and persistent segregation, leading to the deterioration of neighborhoods and quality of life. To alleviate inner city problems associated with the concentration of public housing, the recent few decades have seen a shift from large scale public production of low-income housing to more decentralized, quality-oriented affordable housing policy. One strategy that has gained increasing popularity is inclusionary zoning (IZ), which requires or incentivizes private developers to produce affordable housing along with market-rate housing developments. While IZ aims at both increasing affordable housing supply and creating mixed-income, socially sustainable neighborhoods, few have examined how IZ programs have achieved the latter goal. The lack of empirical evidence is partly due to data...
limitations and the varied features of local IZ programs in the US (Schuetz et al., 2009, 2011), which make it difficult to derive meaningful conclusions on the effectiveness of IZ from cross-jurisdiction comparisons.

This study explores the desegregation effect of IZ by examining a mandatory IZ scheme in London, U.K., which has been established by a series of national policies in the 1990s. A micro-level housing production dataset from the Greater London Authority with development specific information, including addresses, allows a close-up examination of where the affordable units are built. The paper compares the distribution of affordable housing provided by private developers through the IZ scheme and that of market-rate housing units, as well as the placement of traditional public housing provided by local authorities or social landlords. It then tests the linkage between the share of affordable housing in market-rate developments and neighborhood characteristics. Two research questions are asked. 1) Is the production of affordable housing through IZ truly neighborhood neutral? Or, are affordable units still concentrated in poor, low opportunity areas? 2) Is the distribution of affordable housing produced through IZ more equitable than that of traditional public housing projects? The results would shed light on the effectiveness of mandatory IZ in reducing residential income segregation and provide much-needed evidence for the ongoing discussion over the adoption of mandatory IZ in other parts of the world, including many U.S. cities.

References


UNDERSTANDING THE LONG-TERM EFFECT OF GOVERNMENT HOUSING REGULATIONS ON SPATIAL DISTRIBUTION OF PUBLIC HOUSING DWELLERS: A CASE STUDY OF SINGAPORE

Abstract System ID#: 680
Individual Paper

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One commonly observed issue in the vast majority of Asian cities is economic growth that pushes land prices up, especially in urban and inner-city areas. Consequently, low- and middle-income households are priced out of land markets. As affordable housing in Asia is a serious and considerable challenge, governments have implemented housing programmes, policies and institutional arrangements to provide a range of affordable housing alternatives. To assist policymakers with evaluating urban development policies and anticipating trends in the evolution of cities, researchers have significantly improved modern urban land-use-and-transportation (LUT) models (Miller et al. 1998; Waddell, 2002). However, few studies focus on the long-term effect of government housing regulations on the spatial distribution of residents. Key reasons include the lack of longitudinal data with spatial details for demographic groups, and limited modeling strategies to handle the interaction between housing policies and households’ residential relocation choices. As a result, policy makers and planners have limited tools for testing the spatial consequences of government intervention in housing markets after several cycles of slow/fast economic growth and demographic shifts. In order to fill the gap, this study uses Singapore as a case to examine whether the rules are significant enough to impact household residential relocation choices in ways that have long-term spatial and demographic consequences.

Singapore has heavy government control over the housing markets, through direct construction and strict eligibility rules for public housing. During the past few decades, public housing projects, together with public
housing policies, have enabled home ownership for the majority of Singaporeans (Saxona, 2011). Meanwhile, Singapore has a wealth of demographic, transport, real estate and infrastructure data, much of it with rich spatial detail. These data provide a rich test bed in which to investigate the long-term effect of government intervention in the spatial distribution of Singaporean households.

By using the Singaporean census data from 1990, 2000 and 2010, we find that some neighborhoods exhibit demographic bulge that is certain demographic groups are overrepresented in certain neighborhoods compared with the Singapore total. More interestingly, these bulges persist across several decades. In particular, the elderly become more concentrated in the central region, whereas young children become more clustered in the peripheral regions. On the one hand, individuals’ moving behavior is consistent with research in other market contexts (Clark and Dieleman, 1996). On the other hand, given that a significant number of households that enjoy eligibility priority according to their life course stages move to newly built public housing towns each year, public housing towns built in different years exhibit distinct age compositions. For example, for a public housing town built between 1970 and 1979, the population bulge appears at the age groups 55 and over. This indicates that the spatial concentration of age groups could be an indirect outcome of the interaction between market and governmental forces.

Furthermore, the question that how government housing regulations may expand or limit the opportunities to move for individuals is not well understood and has not been studied yet. In order to answer this question, we conduct a survey targeting on recent movers in Singapore—people whose households changed residential location in the last two years. By utilizing the new dataset, we will build several practical Markov Chain models to model the lifecycle experience of households with key events that trigger consideration of moving and their housing bundle choices, including tenure, housing types, and location, and then replicate the observed demographic bulges of certain age groups. The results will provide us with a better understanding that to what extent the persistency of demographic bulges of certain age groups would account for the regulatory effect on households’ residential relocation choices.

References
recent efforts have been implemented as part of the Moving to Work (MTW) demonstration which requires participating to agencies to test innovations that will support economic self-sufficiency amongst work-able tenants. Freed from most HUD regulations, MTW agencies are able to test controversial policies such as time limits and work requirements in addition to less contentious ones such as targeted incentive accounts and rent reforms which encourage increased work efforts (Webb, MD, Frescoln, KP, & Rohe, WM, 2014).

As part of its MTW participation, the Charlotte Housing Authority has implemented; incentive accounts, rent reforms including biennial income recertification and banded rent, and a pilot work requirement with supportive case management for work-able tenants at five public housing sites. Using data from longitudinal interviews with public housing residents, we explore (i) residents’ understanding of economic self-sufficiency, (ii) the role public housing plays in helping them become economically self-sufficient, and (iii) their perceptions of the housing authority’s rent reforms, work requirement, and case management interventions. More specifically, the research addresses how residents perceive the various self-sufficiency initiatives implemented - which program(s) motivate them to improve their education and/or increase their work efforts? Results can inform existing policy debates such as: Should housing authorities prioritize requiring residents to work or removing barriers to work? Are sanctions, such as rent increases and possible eviction, more effective than incentives like escrow accounts and rent reforms that delay or otherwise lessen the impact of increased wages on tenant rent calculations? What are the unintended and collateral consequences of enforcing a work requirement on a population that is predominately single, black, women with dependent children?

HUD calls the Moving to Work demonstration, “America’s Housing Policy Lab;” self-sufficiency policies tested by MTW agencies and deemed “successful” may become national HUD policy. Housing authorities play an essential role in supporting some of our nation’s most vulnerable individuals and families. Identifying best-practices in helping work-able individuals become economically self-sufficient is important not only to the families helped but also to those stuck on often-lengthy wait lists. As housing authorities test welfare reform-like policies such as work requirements and time limits, it is critical that policy makers learn how residents perceive and react to these reforms so that the policies and programs enacted achieve their intent.

References
corporations. In recent years, urban renewal programs that included relocation have also been undertaken to deconcentrate poverty (Goetz 2003), eliminate public housing (Oakley and Ruel 2013 ), and implement gentrification programs (Newman, et. Al, 2006).

There is, however, very little work on the urban redevelopment experiences of less developed countries that have recently transitioned from a socialist to market economy system. The few studies available concentrate on the experiences of China and Vietnam and the focus seems to be on how these countries are privatizing their land holding and housing system. Among African and Latin American countries, there is very little work done in this area.

The objective of my paper is to help fill this gap by documenting the urban redevelopment experiences of Ethiopia by focusing on the capital city Addis Ababa. After several decades of socialist rule, Ethiopia has transitioned into a market economy. Some of the major urban development programs the country faces include the rise in population, the deterioration of infrastructure in many neighborhoods, the issue of land ownership and the crises in housing shortage. To address these problems, the Municipality of Addis Ababa adopted the land lease and land auctioning system to rationalize land holding, raise capital to help revitalize the deteriorated infrastructure of cities, provide condominium homes (based on the experiences of Vietnam and China) to low and middle income households and to attract private investment to build the central part of the city. The Municipality of Addis Ababa has built over 80,000 condominium homes in 30 sites in the last ten years, and also has relocated thousands of residents from the central city to the suburbs where the condominium are located.

The analysis will be based on a survey of households from three sites. The sample includes 300 families relocated from the central part of the city into condominiums. The relocation program expects families to be able to front between 10 to 30% of the down payment for the condominiums (depending on their choice – one or two or three-bed room homes) and also qualify to get mortgage loan from a bank. Most of these residents did not have the resources to come up with the down payment or qualify for mortgage loan. Yet, through social networks and government guaranteed loan programs many have succeeded in owning condominium homes. My paper will focus on the experiences of these families, specifically as it relates to: (a) how the land lease and land auctioning system impacted them; (b) how the municipality engaged them in the relocation process, i.e. the citizen participation aspect; (b) how they were able to raise funds for down payment and also qualify to secure mortgage, and (c) how the relocation program has affected their life, specifically as it relates to jobs, transportation, social ties, school for children and safety for family. The analysis will compare their perspectives in the old vs. new neighborhood on some of the neighborhood and housing characteristics.

References
Transit-oriented development (TOD) programs are intended to boost transit ridership, walking, and cycling while decreasing automobile use, by increasing dense, mixed-use housing development near transit stations. But it is uncertain whether TODs actually reduce auto use on the whole, and research has suggested that reductions are highly dependent on the characteristics of TOD (Chatman 2013). A related problem is the fact that transit investments could cause gentrification and displacement, with an uncertain overall impact on auto use. Automobile ownership and use usually increases when neighborhoods gentrify (e.g. Pucher & Renne 2003). Developing new housing near transit could have a marginal effect on net travel patterns or even increase auto use overall, if it is followed by an influx of wealthier, car-owning families and a displacement of transit dependent households who subsequently are forced to drive (e.g. Lund et al., 2004; Pollack et al., 2010). On the other hand, if wealthier households moving into transit-rich areas reduce their auto use —and, if poorer households moving farther away still depend largely on alternative modes—then the net impact of gentrification and displacement could be to decrease auto use, while also making the lives of poorer households more difficult.

This paper presents an empirical analysis of the relationship between household moves, rail proximity, income, and auto use using datasets that include explicit information about household location as well as information about the most recent move. We investigate the correlation of rail station proximity and household vehicle miles traveled (VMT) using two different data sources, and both looking over time and accounting for the recency of the household move.

Our first data source is the confidential version of the National Household Travel Survey (NHTS), which includes 2,583 California households in 2001 and 21,663 in 2009, along with a Census block group identifier allowing us to measure transit proximity for each household. Our second data source is the confidential version of the California Household Travel Survey (CHTS), with 42,431 households surveyed in 2010-2012. The confidential CHTS provides a latitude-longitude pair for each household residence, allowing us to calculate transit proximity exactly; the year of the household’s most recent move; and the zip code and city of the previous residence if the move was within five years.

We have begun the analysis and have some preliminary findings. First, while people living within a half-mile of a rail station drive less than those who live farther away, this effect is smaller in 2009 than in 2001, after a period of gentrification that has generally occurred in our California dataset. Second, household income has a larger positive correlation with VMT for those near transit than for those who live far from transit, also consistent with the notion that lower income people reduce their auto use more than high income people in response to transit accessibility.

We will continue to work with the data in refining this descriptive analysis, including investigating the locations from which lower income and higher income households recently moved. Our final major analysis step will be to carry out regressions controlling for the recency of the move, and for characteristics of the previous location, and also carrying out regression analyses on subsets of the data such as those of lower income and higher income, who have moved recently. This analysis will enable better inference as to the effects on VMT of people moving near and far away from rail. Once complete, our study will add insight about the possible unintended consequences of transit-oriented development, and will help guide TOD programs and policies.

References
GENTRIFIERS OR COMMUNITY ANCHORS: ARE ART MUSEUMS GOOD FOR URBAN NEIGHBORHOOD RESIDENTS?

My dissertation research examines how urban art museums impact their adjacent neighborhoods to understand when they contribute to the type of gentrification that displaces ethnic minorities and/or poorer households, and when they might help ‘anchor’ or even build diverse communities. The results of my research suggest that an art museum’s role in community development, rather than being predefined and fixed, very much depends on metropolitan economic factors and the funding sources available.

Urban and museum academic literature view institutions like art museums in highly contradicting ways. ‘Classic’ critical urban theory views institutions like art museums as examples of how elite actors organize space for the purposes of increasing land value (Harvey, 2001; Logan & Molotch, 1987) and/or maintaining a stratified urban social hierarchy (Castells, 2002). This critical view of art museums frames them as part of a gentrification process that often displaces and isolates ethnic minorities and poorer groups. Other theories frame art museums as places that can actually help anchor urban neighborhoods (Birch et al, 2013) and build communities (Gurian, 2001) by providing accessible space for social interaction and education.

To understand the museum-neighborhood relationship at different scales and through different perspectives, I tracked socio-economic change in 92 census tract neighborhoods adjacent to 31 nation-wide art museums in 21 cities using data from the 2000 and 2010 U.S. censuses. I also completed a 3-month, in-depth observation of an urban art museum’s operations and programming decisions (the Portland Art Museum in Oregon), and I conducted roughly 30 interviews with neighborhood constituents, real estate developers, and museum staff in Portland, OR.

My analysis of census data indicates a strong connection between a city’s economy trajectory and whether an art museum contributes to the gentrification of urban neighborhoods or helps anchor them. The data from my case study of Portland Art Museum (participant observation and interviews) describe how a city’s economy influences the funding sources and programming decisions of an art museum, the relationships the museum forms with outside groups, and how these programming decisions and relationships influence neighborhood residents. The results of my research support two conclusions: 1) High growth urban areas see increased investment from real estate developers in art museum neighborhoods and increased museum program funding by elite patrons, which tend to make art museums agents of displacement in their adjacent neighborhoods. 2) Low growth urban areas, and their relative lack of investment from real estate developers in art museum neighborhoods and museum funding by elite patrons, tend to force art museums to rely on national arts grants that emphasize engagement with diverse community groups, thus helping them anchor the diverse residents of adjacent neighborhoods.

Rather than ‘pigeon-holing’ art museums as agents of displacement and elite interests, or uncritically assuming they serve ‘the public,’ my research describes how urban art museums can play a significant role in the unequal delineation of urban space through economic displacement, as well as how their programming and outreach can help make urban space less unequal, depending on metropolitan economic trajectory and funding resources available to the museum. I argue that the inclusion of affordable housing in art museum neighborhoods and more museum grant funding that emphasizes engagement of diverse groups can help neighborhoods and their art museums cultivate more equal urban space.

References
Initiated in 1999, the ten-year Chicago Housing Authority Plan for Transformation sought to fundamentally change the relationship between low-income households and forms of Federal low-income housing support. Fifteen years later, the plan is still being implemented. Many of the residents initially displaced by the redevelopment continue to reside off-site, either by choice, due to limited subsidized replacement housing, or due to the slow pace at which replacement units have been constructed.

Residential mobility has played an important role in grounding Federal low-income housing policy and evaluations of its effectiveness. As part of the Plan for Transformation, over 4,000 households received relocation vouchers to facilitate moving out of public housing units slated for redevelopment. Other households moved into public housing units not slated for demolition. Still other households left assisted housing altogether. Recent evaluations of Chicago Housing Authority relocatee household locations reveal that an overwhelming majority of these households continue to live in high-poverty, racially segregated communities, although demographic indicators provide evidence that these neighborhoods are still substantially better off than the neighborhoods where relocatees originated (Popkin, et al. 2013). This work also shows that while within-household conditions (labor market participation, child welfare, elder welfare) have improved across the board, that there is little substantive difference in outcomes regardless of residential location or whether relocatees chose to move with vouchers or remain in public housing units (Chaskin, et al. 2012).

The powerful insight derived from these evaluations are limited by two factors- coverage- a focus on those households who remain in subsidized housing (as opposed to those who phase out or who drop out of the program), and timeframe- the period of time for which the analysis is performed. Given the findings from past evaluations of post-Plan for Transformation neighborhoods, are public housing relocatees moving on or up?

To complement the existing research, this research uses a novel source of longitudinal household data to examine the residential transitions of households who were displaced as a result of public housing redevelopment in Chicago. Because this study does not rely upon administrative records on subsidized households, broader patterns of mobility can be assessed, particularly for those households who left Federal housing assistance. This research focuses on two qualities of the neighborhood transitions of displaced households- the demographic characteristics and structure of the residential neighborhoods which public housing relocatees moved into, and the overall trajectory of these neighborhood characteristics over time. Taken together, this research questions what mix of spatial and demographic factors predict households moving to more (or less) favorable neighborhoods. The findings of this research will prove valuable not only for measuring the impact of public housing redevelopment policy, but also for assessing whether residential mobility can help disadvantaged households access the social and economic opportunity present in other neighborhoods.
Despite the City’s recently concluded bankruptcy and continuing population loss, two districts of Detroit--Downtown and adjacent Midtown--are showing clear signs of new private investment in residential real estate. Each continues to be the target of a variety of revitalization investments, primarily from the corporate and philanthropic sectors. The investment strategies and related planning activities have some critical elements in common, but also some notable differences. This paper summarizes the strategies used in each target area. It then compares the performance of two virtually identical, and widely acclaimed programs, Live Midtown and Live Downtown, designed to provide a sustained stimulus to the demand for rental housing, and interprets the results in light of the characteristics of their contexts.

Downtown Detroit has received widespread media attention as a result of significant investments by Dan Gilbert, founder of Quicken Loans, who now owns or effectively controls about 60 buildings in the CBD. His development firm is improving the properties and recruiting new tenants; his goal include creating a walkable, mixed use district with substantially greater residential density that appeals to young professionals. Over the past four years, Gilbert has moved the employees of all of his Southeast Michigan corporate offices to buildings he purchased and persuaded other major employers, e.g. Chrysler, Blue Cross-Blue Shield, to relocate some of their employees Downtown. Those early entrants to the CBD are the employers participating in Live Downtown.

Midtown, immediately north of Downtown, is the city's second largest employment center. Its revitalization is widely viewed as critical to Detroit’s future. Its anchor employers--Wayne State University (WSU), the Detroit Medical Center (DMC), and Henry Ford Health System (HFHS)--have all committed to major investment programs in and around their facilities, and Midtown Detroit Inc, a very high-capacity nonprofit planning and development organization, has long pursued the revitalization of the neighborhood. The Woodward Corridor Initiative (WCI), launched in 2010 by these organizations and others with funding from Living Cities, allowed them to expand their efforts; Live Midtown, targeted to employees of the three anchors, was launched in 2011.

Live Midtown and Live Downtown, started at about the same time, each provide the same attractive package of financial incentives for employees to move to their employer’s target area. To date, they have been credited in the media with bringing rental vacancy rates in both neighborhoods down to 3 percent (this in neighborhoods reported in the 2010 census to have vacancy rates above 15 percent).

This paper will examine the strategy behind the Live Midtown and Live Downtown program design, and their performance during their first four years of operation, with particular attention to where participants located and the rents they pay. It will pair this with an examination of private developer activity in the neighborhoods, including the innovative financing and incentives employed in both places. The expected finding is that the combination of demand and supply strategies is required to jump-start such a weak housing market, i.e. that the highly visible demand stimulus would have been inadequate to produce the desired market response Since the rough “formulas” for both the demand and the supply-side incentives are being used in not only in Detroit but also in other “legacy” city districts, and clearly have broader replication potential, the design and performance of
these interventions, and the aspects of context that seem to make a difference in their impact, may shed light on what results might be expected if the strategy were deployed in other shrinking cities.

References

Abstract Index #: 287
CORPORATE-SPONSORED INFORMALITY: ONLINE HOMESHARING AND ITS EFFECTS ON HOUSING MARKETS AND NEIGHBORHOODS
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Individual Paper

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Internet-based “homesharing” services simultaneously offer travelers a new option for accommodation and raise important questions about their effects on housing markets. They also raise vexing regulatory questions, since private dwellings rented for short-term stays frequently violate local laws such as zoning ordinances and requirements to pay hotel taxes. As a consequence, the recent explosive growth of such services as Airbnb has forced several US cities to confront whether and how to regulate homesharing, even while operating with a dearth of data on homesharing’s effects on housing markets and neighborhoods.

Proponents of homesharing argue that it stabilizes housing markets by providing extra income to homeowners or renters, allowing them to remain in their homes even in the face of escalating housing costs. Critics, by contrast, note cases in which homesharing has facilitated the removal of entire housing units from the long-term housing market and their extralegal conversion to de facto guesthouses or dormitories. Which of these two effects outweighs the other? In addition, what is the geographic distribution of homesharing within a city? Can an estimation methodology addressing these questions be crafted that could be replicated by cities seeking data to inform their efforts to regulate homesharing?

To date, these questions are relatively underexamined. One study, which portrayed the effects of homesharing as comparatively benign in New York City, is suspect because it was commissioned by Airbnb (Rosen, Sakamoto, and Bank, 2013). Another, more detailed, study by the New York State Attorney General’s office (2014) reached a much more damning conclusion, although it was carried out by an entity pursuing legal action against Airbnb. We believe that a careful academic study, carried out by researchers with no personal, professional, or financial stake in the success or failure of any homesharing service, analyzing the effects of homesharing in large US cities is needed and timely.

Our study, already underway, uses “webscraping” and GIS software to systematically collect and map the Airbnb listings in two cities: San Francisco and Austin. Both are examples of cities that are associated with the technology industry, are prominent tourist destinations, and that are experiencing burgeoning housing demand fueled by rapid economic growth. Not surprisingly, homesharing and its effects on housing markets and neighborhoods have been controversial in both. At the same time, they provide an interesting contrast: San Francisco has a robust rent stabilization ordinance, thus increasing the opportunities for profiteering via Airbnb, while Austin lacks one entirely.
Urban theorists such as AlSayyad (2004) remind us that informality is not only the province of immigrants or the working class seeking to eke out a living amidst hardship. With the rise of homesharing, businesses such as Airbnb whose profitability depends on the flouting of laws that regulate housing and hospitality portend the rise of a new type of corporate-style business operating in the informal economy. The question that cities face is whether to bend their existing regulatory frameworks in the face of such disruption, or seek to suppress it. Our hope is that our study will be helpful to both academics and practitioners seeking to grapple with such questions.

References


Abstract Index #: 288

URBAN FORM AND SOCIAL SUSTAINABILITY IMPACT ASSESSMENT IN MICROSCALE BY USING AHP AND MCA: EVIDENCE FROM ONE HUNDRED NEIGHBORHOODS IN TEXAS

Abstract System ID#: 811
Poster

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Since sustainable concept development was born, the different dimensions of sustainability have not been equally focused on, and the emphasis has only been on the concept of environmental sustainability. As a result, the most notable argument regarding the relationship between sustainability impacts and urban form revolves around the environmental aspect of sustainability that encourages high density and mixed-use development to decrease urban sprawl and protect agricultural lands. However, other studies have discussed that this perspective seems to not fully address how humans interact in complex ways with social involvements. They argued that if people have the choice, they would choose low-density suburban living rather than compact city living.

This research will review debates about social sustainability and highlight some relationships to understand in what way does urban form contribute to social sustainability. An extensive literature review was conducted in order to explore the concept of social sustainability and critically examine the main impact assessment methods and metrics established to measure its nature. Next, it review debates about urban form and social sustainability and point out some expecting relationship to assess in what ways does urban form contributes it.

The empirical part of the paper will present some new evidence based on one hundred chosen neighborhoods in the five biggest cities in Texas (Dallas, Fort Worth, San Antonio, Houston, and Austin). Twenty registered neighborhoods association with their respective cities from inner, middle, and outer area of each of these cities were selected. 2010 census data and the database of neighborhood associations were used to collect data and measure social sustainability dimensions. The multiple centrality assessment (MCA), and the analytic hierarchy process (AHP) as a multi-criteria decision-making (MCDM) method were used to aggregate the impacts of the proposed criteria into a social sustainability index and define the relationship between these dimensions.

Based on literature and dataset, this research proposed social sustainability in microscale as comprising two main dimensions and nine suggested criteria: (a) “equity” (access to local services, public transportation, affordable
housing, and employment), and (b) “community and society” (participation and interaction in the community, cultural and community diversity, pride and sense of place, stability, and safety). The result derived from regression modeling indicated how far social sustainability could be explained by systematic relationships with different dimensions of urban form (distribution of job densities, density of residential development, local road networks layout, dominant type of residential (single family or multi-family), use of land (separation or intermixed with residential and activities), and housing layout) in neighborhood-scale. The results revealed that there exists a significant relationship between social sustainability and different variables of urban form.

References


The Myth of Self-Sufficiency

Historically, the objectives of U.S. housing policy was to provide “a decent home and in a suitable living environment for every American family. The focus was on creating and managing housing that met minimum quality standards, and on making that housing available to modest-income families. Starting in the 1980s, however, the objectives of housing programs began to be broadened to include the promotion of “self-sufficiency” among the residents of public housing. Beyond providing decent and affordable units, the 3,300 U.S. local housing authorities responsible for building, managing and administering public housing programs were now expected to assist their clients develop job skills, find and keep employment, increase their incomes, and ultimately become “self sufficient” (Kleit and Rohe 2005, Newman and Harkness 2002, Rohe & Kleit 1999, Silva et al. 2011). Beyond HUD’s Family Self Sufficiency program, many other HUD programs have resident self sufficiency as a key program goal including the Moving to Work, Jobs Plus and the Choice Neighborhood programs.

The terms “self sufficiency” have slipped into the titles and objective statements of contemporary housing programs without a clear understanding of what they really mean, their implications for explaining poverty, the barriers to becoming self sufficient, and whether achieving self sufficiency it is a reasonable expectation for many public-housing residents.

The purpose of this article is to provide a critical analysis of the concept of self sufficiency as it has been used in U.S. housing policy. More specifically, the paper will address the following questions:

1. What are the cultural origins of the concept of self-sufficiency?
2. What has led to its inclusion in U.S. housing policy?
3. How has self-sufficiency been defined in federal housing and social policy? [A review of policies and programs will be provided here.]
4. What are the key arguments for and against including self-sufficiency as a key objective of affordable housing programs?
5. What are reasonable expectations for self-sufficiency among very-low-income households given the many obstacles they face?
6. What do we know about the effectiveness of self-sufficiency programs?
7. How should the effectiveness of self-sufficiency program be assessed?
8. Should we continue to use the term self-sufficiency or are there more appropriate terms?

The methods to be employed in developing this paper are literature review and analysis.

References

Abstract Index #: 290
DETERMINANTS OF METRO- AND COUNTY-LEVEL VARIATIONS IN EQUALITY OF OPPORTUNITY
Abstract System ID#: 830
Individual Paper

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Chetty et al (2014) recently produced metro-level and county-level measures of intergenerational economic mobility in the U.S. from millions of income tax records. Their research shows clear geographical differences in the equality of opportunity across the United States. Significantly for urban planning, they find that areas with greater racial and economic segregation experienced less upward mobility and that more “sprawling” areas (as proxied by longer commute times) also experienced less intergenerational mobility. Their results indicate that place – and planning – matter significantly in shaping the equality of opportunity.

In this study, I build on Chetty et al (2014) and utilize their estimates of metro-level and county-level relative and absolute intergenerational mobility. I supplement these measures with other metro- and county-level measures of equality of opportunity, primarily black-white earnings and poverty differentials. Through maps and descriptive statistics, I show the geographical variation in equality of opportunity across areas.

I then present a regression analysis of the determinants of cross-county and cross-metro variations in mobility measures. Building on work on housing supply elasticity (Paulsen 2012) and on measures of sprawl (Paulsen 2014), I estimate the impact of land use and housing supply policies on the spatial patterns of intergenerational inequality. Specifically, I test the following hypotheses: 1) how does the relative availability of rental housing supply outside of central cities (suburbs) explain interregional variation in mobility? 2) what is the relationship between “sprawl” (measured as marginal land consumption per net new household), land development restrictions and equality of opportunity? 3) how do housing prices/rents explain geographic differences in opportunity.

References
During the Great Recession, nonprofits’ demand for services has increased while they are experiencing unprecedented financial strain (Anheier 2007; Golden, Longhofer et al. 2009; Johnson 2011). This research focuses on nonprofit housing development organizations (NHDOs) in California during 2000-2010. NHDOs typically develop and/or manage housing and provide social services for low income persons.

In the past 20 years, many NHDOs have struggled with adequate capital and operating reserves to preserve their affordable housing stock (Bratt, Vidal et al. 1998). For NHDOs, these financial issues are exacerbated by the housing and economic crises and the recent elimination of California state Redevelopment Agency funds. There have been a few studies on the effects of the economic crisis on the nonprofit sector but no systemic analysis on outcomes for NHDOs.

This paper addresses the research question: how have nonprofit housing development organizations been affected by the Great Recession that began in 2007? It studies the effects of the housing and economic crises on NHDOs in California regarding survival and revenue, during the period of 2000-2010. This mixed-methods research analyzed a cohort of about 800 California NHDOs in 2000 and determined if they survived in 2010 and what factors effected their performance. The quantitative research included a multivariate analysis of variables that influence the sustainability of nonprofit housing development organizations. For the qualitative research, interviews of executive directors and managers of nonprofit housing developers and housing associations assessed how and why these organizations experienced variations in survival and revenue.

With funding decreasing on all levels of government (federal, state, and local), NHDOs had to strategically manage their housing development pipeline, real estate portfolios, and staffing levels. From this research, the four main factors were associated with NHDOs’ survival and performance: (1) regional differences and agglomeration effects, (2) diversifying revenue sources, (3) implementing adaptive management, and (4) establishing joint ventures and mergers. The lessons learned and management tactics from these NHDOs inform other organizations how to survive and thrive during tough economic times.

References
Gentrification is a shift in an urban community toward wealthier residents or businesses and increasing property values, at the expense of displacement of the poorer residents of the community. This is one of the most widely used concepts in urban planning and development, and has been practically evident in many cities around the world for the past several decades. However, poorer residents who are unable to pay increased rents in a gentrified community may be driven out. A more serious problem than displacement is the removal of affordable housing from the community’s building stock.

In this sense, the Community Land Trust (CLT) can be a good way to address negative effects of gentrification. CLTs arose from the concept that land is not a private good but a public asset. The fundamental principle of CLTs is that a community owns and leases lands through a long-term ground lease to individual residents who own their homes located on the land. CLTs are used in the U.S. mainly to provide long-term owner-occupied housing for low income households, and are rapidly disseminated in the U.S. This research aims to assess the impacts of CLTs on gentrification to practically answer the question; “Do CLTs really counteract the negative effects on community caused by gentrification?”

To assess the impacts of CLTs, the information of each CLT units’ locations and the year of introduction was requested to 131 CLT organizations, and responded from 68 organizations (response rate is 52%) with 3,709 units’ information. A mixed method research, which uses both quantitative and qualitative methods, is a fundamental structure to get a more holistic view about the research question. The relationship between CLTs and gentrification is examined through a cross-sectional comparison and a logistic regression in the quantitative approach; how the findings of the quantitative approach are fit for the practical situation is reviewed by the qualitative approach. Findings show that CLTs have a negative relationship with gentrification and suggest that CLTs can address the problems caused by gentrification.

This study can show how CLTs have positive impacts on neighborhoods in practice from the public’s perspective. Therefore, the results of this study offer policy guidelines to the city governments having a plan to introduce CLTs in their jurisdiction, and help community leaders and/or residents know how to improve and stabilize their neighborhoods. While comprehensive CLT information are investigated in this study, it is expected that more case studies about practical CLT cases in the U.S. will be followed, and finally, this study can be one of the significant cornerstones for evaluating the CLT model itself.

References

This roundtable discussion will be sponsored by Housing Policy Debate and will invite four housing policy researchers to discuss future trends in housing research. This coincides with an issue of Housing Policy Debate that includes essays on trends in housing research written by 10 editorial advisory board members. The set of essays will be the topic for discussion as well as additional comment from the panel and audience.

Abstract Index #: 294

CONTEXTUALIZING URBAN ‘JUST’ REDEVELOPMENT: THE ROLE OF SOCIAL JUSTICE AND SOCIAL CAPITAL IN RESETTLEMENT

A better city has a more equitable and redistributive system: it is a ‘just city’ where “public investment and regulation would produce equitable outcomes rather than support those already well off (Fainstein, 2010, p.3).” By listing specific policy criteria that would further equity, diversity, and democracy, Fainstein (2010) and Marcuse (2009) stress out powerless marginalized groups should be able to participate in decision-making process and its outcome should be distributed equitably. For better city, redevelopment of deteriorated residential settings can create new economic opportunity for revalorization of underdeveloped urban space. That said determinants of urban renewal success are complex. Neighborhood renewal and relocation of current inhabitants often go hand-in-hand. The relocation of original residents from redeveloped areas often creates the effect of lowering social cohesion and social ties within neighborhoods. Also, redevelopment often fails to provide improvement in existing social, economic, and environmental status of those relocated individuals; ultimately leading to redeveloped space surrounded by societal breakdown reflective of physical and social decay.

Following Fainstein’s (2010) social justice practice and Soja’s (2010) spatial justice discourse in urban planning context and learning from recent housing and residential redevelopment projects within a metropolitan area in Korea, we investigate the relationship between original residents‘ intention to resettle and various social justice attributes (including equity, diversity, and democracy), social capital, socio-economic characteristics, and community amenities. Based upon a review of the extant literature, three theoretical hypotheses are proposed. First, social justice (e.g., residents‘ participation in social issues, voting turnout, number of non-government organizations), social capital (e.g., longtime residence, satisfactory ties with neighbors), and a higher preference for civic participation (i.e., a higher degree of participation by original residents) components are positively correlated with the original habitants‘ preference for resettlement in the redevelopment project. Second, household and individual level status, such as a big family, high household income, age, and owning their house, is positively correlated with the original residents‘ intention to resettle; and third, better accessibility for neighborhood or local amenities is correlated with higher original dwellers‘ intention to resettle.

This study employs multi-level and spatial data analysis (spatial clustering, geographically weighted regression) incorporating survey based data collected from former residents in 137 designated residential redevelopment areas from April to June of 2011, matched with secondary data from the Korean Statistical Information Service. Among various factors derived from the previous studies, housing price variation, neighborhood bonds, and the period for the project completion were selected as resettlement determinants. More importantly, due to a higher likelihood of a housing value increase after redevelopment, the residents were more likely to be willing to resettle. Regarding social networking and community involvement in residential resettlement, the better a residents‘ social networking conditions, such as relationships with neighbors and participation in the redevelopment projects, the higher the probability of resettlement. These empirical findings can be useful in addressing the positive role of social justice and social capital in determining resettlement of original dwellers‘ intention.
RACE AND UNEVEN RECOVERY: NEIGHBORHOOD HOME VALUE TRAJECTORIES IN ATLANTA BEFORE AND AFTER THE HOUSING CRISIS

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During the U.S. housing boom and bust, U.S. home prices rose to unprecedented heights, lifted by poorly underwritten mortgages. When the U.S. housing crisis began in late 2006 and 2007, home values crashed and foreclosures and vacancies skyrocketed. In 2011, a modest recovery began. However, this national story obscures a great deal of variation underlying the averages. The bubble and housing deflation hit some regions, states, and cities hard, while others were left almost unscathed. In particular, there have been substantial differences in the degree to which different neighborhoods have rebounded from the crisis. How can we characterize the neighborhood-level unevenness of this crisis, and why have some neighborhoods recovered more than others have?

Some research has investigated metropolitan-level variations in outcomes during the bubble and foreclosure crisis, focusing on institutional factors leading to the density of subprime lending (Williams, McConnell, & Nesiba, 2001), variation in state foreclosure law (Immergluck, 2010; Mian, Sufi, and Trebbi, 2011), or patterns in new home construction (Saiz, 2010) as key factors differentiating home price bubbles and recovery from others. However, there has been little work to date on intrametropolitan – or neighborhood-level - variations in home prices up through the recovery period. There is no clear evidence which types of neighborhoods have fared better than others within a metropolitan area.

In this analysis of intrametropolitan variation in housing values, we use zip-code-level home value data and cluster analysis to define three different types of neighborhood housing markets in the Atlanta metropolitan area based on their levels of volatility and stability before, during, and after the crisis. We identify the demographic and housing market characteristics of each of these three clusters and use multivariate analysis to measure their predictive association with the three neighborhood types. We also examine the factors that predict long-term price appreciation over the 2001 to 2014 period.

This paper aims at understanding the factors that predicted whether a neighborhood experienced extreme volatility in housing prices during the boom and bust and the extent to which housing price recovery occurs. It develops a method of categorizing and understanding types of uneven housing market recovery, and identifies fundamental demographic and housing market characteristics associated with different housing market trajectories within a region hit hard by the subprime and foreclosure crises.
Consistently strong relationships that suggest that many black neighborhoods — even those with lower degrees of poverty — exhibited steep rates of price decline with only modest or essentially no recovery following the crisis. Meanwhile, many predominantly white, middle- and upper-income neighborhoods experienced less volatility during the boom and bust, and have generally more than recovered from the modest housing price declines that they did face. The reasons behind these patterns are complex and not directly addressed here. However, it is important to understand that such variations occurred and that they were associated with racial differences.

References

Abstract Index #: 296
HOUSING ACCESS AND GOVERNANCE: THE EFFECTS AND EVOLUTION OF HOUSING ORGANIZATIONS IN MEXICO CITY
Abstract System ID#: 888
Individual Paper
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In The City and the Grassroots, Manuel Castells argues that throughout history and in different parts of the world, urban social movements have been able to have a major impact on public policies and spatial structures. I argue that housing movements and organizations in Mexico City have evolved to have such an effect. Yet, even when dire conditions may at times urge people to coalesce and mobilize around shared concerns, macroeconomic and sociopolitical forces also continuously challenge and weaken the social and political platforms which civil society requires to monitor and scrutinize the various processes that drive the growth and development of their communities, cities and regions. This paper studies the evolution of urban social movements and housing organizations in Mexico City, and their role in the production of low-income housing. I argue that mobilizations around detrimental housing conditions provided more than support to low-income tenants and affordable housing production. They also pushed for the democratization of the local government. This in turn aided, with the election of a sympathetic government, in the consolidation and institutionalization of housing programs. Currently, however, housing unaffordability continues to be a significant issue, and the powerful grassroots organizing that developed before the turn of the century seems to be dwindling.

Rapid urbanization during the 20th century in Mexico City made housing conditions increasingly harsh for low-income residents. Besides the physical deterioration of low-income housing and inner-city neighborhoods, a lack of oversight and regulation produced unfair landlord-tenant relations, accelerated rent increases, and an escalation in the number of evictions. Furthermore, urban renewal projects led to the demolition of thousands of low-income housing units. As a consequence, tenants and low-income residents began to mobilize to oppose inadequate housing conditions and urban renewal projects. Civic opposition to the economic and political forces that enabled such conditions culminated in the formation of the Asamblea de Barrios (Neighborhoods’ Assembly) in 1987. Its main objectives were to promote rental housing regulations and low-income housing construction. The second task in particular, forced the Neighborhoods’ Assembly to move beyond mobilizing and involve itself in the financing and actual physical production and rehabilitation of housing.

Nonetheless, the Assembly did not renounce its organizing tactics and remained an important source of sociopolitical mobilization, especially to remove the then established political regime from power. They were first successful, along with other civic groups, in pushing for increased political and administrative autonomy at the
local level through the formation of a Legislative Assembly and the establishment of mayoral elections in the 1990s. This in turn gave housing issues and demands more prominence and allowed the creation and establishment of new norms and institutional frameworks. Thus, and despite limited resources, new local housing strategies set notable standards, particularly within a context of meager and declining federal housing resources, and an increasingly ephemeral national housing policy quickly supplanted by developers and the real-estate market as the main arbiters of housing production and development. Housing organizations were evidently very influential in the drafting and implementation of housing programs that have meant to increase housing access in the city. More recently, however, collective processes of housing production at the local level have also been increasingly replaced by the private sector, leading to a loss of affordability and community involvement. Furthermore, housing organizations and leaders have become increasingly susceptible to political whims and electoral cycles, giving place to clientelistic and corrupt practices. As civic groups have ceased to play the important role of monitoring government actions, housing policies and efforts have lost legitimacy among the citizenry.

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- Bjorn I. Sletto, Ph.D., Associate Professor
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Abstract Index #: 297
LOCATION EFFICIENCY OF AFFORDABLE HOUSING UNDER THE LOW-INCOME HOUSING TAX CREDIT PROGRAM
Abstract System ID#: 895
Individual Paper

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A growing recognition that the cost of transportation should be included in calculations of housing affordability (Dawkins, 2013) has led to government and non-profit initiatives to promote location efficiency in affordable housing policy (Talen & Koschinsky, 2014). As the program responsible for most new affordable housing in the United States (Lang, 2012), the Low-income Housing Tax Credit (LIHTC) program is a critical link between housing affordability and location efficiency. However, the effects of market forces, public policy, and sustainability related location attributes on the development of new affordable housing units have yet to be empirically concurrently modeled.

Using data from the EPA’s Smart Location Database, the paper evaluates location efficiency for all of the more than 37,000 LIHTC properties placed in service since 1987. Drawing on the LIHTC property database, each property record has been matched with the location efficiency data for its corresponding block group. Metrics of relative and absolute location efficiency were then calculated and compared at the State level. Then, several logistic regression models were generated to test which location efficiency characteristics explain the presence of LIHTC properties in block groups—indeed of conventional metrics such as vacancy rates.

Preliminary findings suggest that nationally—while there is room for improvement—LIHTC properties tend to be concentrated in more location efficient block groups. Key contributions of this paper for both practice and research will be 1) determining the extent to which LIHTC has provided housing in location efficient places; 2) identifying policies at the state level that have contributed to more LIHTC location decisions; and 3) determining whether LIHTC housing developers are using location efficiency as a significant location criterion in addition to other location drivers.
Justice and The City: (re)Examining the Past to Create the Future
55th Annual ACSP Conference

References

PUTTING DISABILITY DISPARITIES ON THE MAP
Abstract Index #: 298
Abstract System ID#: 900
Pre-organized Session: ADA PARC

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The use of data-driven “community indicators” and “benchmarking” has grown in the planning field. However, it has not yet been fully deployed to understand the needs and experiences of persons with disabilities, particularly in ways that are meaningful to practitioners and the larger disability community. Significant community and economic participation disparities exist between persons with disabilities and the larger population. Spatial and community- or neighborhood-level conditions play a central role in these trends. Practitioners seeking to plan for and address disability-related livability and participation challenges stand to benefit from better use of data tools and spatial analysis. This paper focuses on the ways in which data and mapping can be used to document, understand, and address community and economic participation disparities for persons with disabilities. We draw from our data and knowledge transfer work undertaken with the Americans with Disabilities Act Participation Action Research Consortium (ADA-PARC). Our goal is threefold: 1) to identify key data indicators useful in measuring livability, community and economic participation, and corresponding disparities; 2) to describe creative strategies as well as challenges to using these data and mapping them spatially; and 3) to present questions or problems that planning educators, researchers, and practitioners might use this data to address. This paper will outline the theory and practice of developing community indicators and their different uses, with a review of other such efforts that have been used to understand the needs of people with disabilities. Next the different data used will be reviewed to discuss limitations but also specific issues of interpretation as it pertains to the target population. We will conclude with examples of the data as it has been and can be put to use in addressing planning questions.

EVALUATING SCHOOL CLOSURE DECISION-MAKING PROCESSES
Abstract Index #: 299
Abstract System ID#: 914
Pre-organized Session: Considering Schools in Community Development

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Many communities across Canada and the United States must contend with permanent school closures. The manner in which school boards interact with community residents is considered problematic and a major contributor to dissatisfaction with accommodation review processes. This paper explores whether, to what extent, and how meaningfully school boards consult with community residents when considering the permanent closure of a school. Planning theory and public participation theory serve as points of reference for this evaluation.

Schools play many roles in a community. They are places of education, of course; they are also an important part of a community’s fabric and sense of identity. Consequently, the permanent closure of a school is one of the most
unsettling and de-stabilizing experiences for any community. From a policy perspective, school closure is a major concern for local governments whose urban planning objectives for communities (e.g. intensified forms of urban development, downtown revitalization) are undermined when schools close.

These are rarely easy or positive situations that are made more difficult because of the manner in which closure decisions are made. The accommodation review process often makes a very difficult situation worse. The accommodation review process that culminates in a closure is, typically, divisive, emotionally charged and conflict-ridden. Community residents feel overlooked and powerless; school board trustees and administrators feel under siege. Distrust, anxiety and anger are common emotions.

Shortcomings in the decision-making process seem to underlie controversial school closure decisions, particularly the manner in which stakeholders are consulted in these accommodation reviews. There have been many calls for change to decision-making processes that have been characterized as exclusionary, insensitive to community needs, and autocratic in nature. Surprisingly, there has been little formal evaluation of the accommodation review decision-making process experience. Indeed, the international literature on this and related subjects (e.g. school closures), while growing, is modest. The extant literature suggests that school board accommodation review processes are at odds with community expectations of accountability, inclusiveness, fairness and transparency in public sector agencies. Critics note that school board accommodation review committee processes are presented as consultative, but they are not fully participatory and they are rarely collaborative in nature or partnership based.

This paper reports on preliminary findings from a multi-year research program that studies accommodation review process design and practices in Ontario, Canada. The paper identifies and categorizes current school board practices, and considers whether planning theory and public participation theory could improve accommodation review process design and management.

References

households can expand access to homeownership and lead to a more robust neighborhood recovery (Pfeiffer and Molina 2013). Little is known, however, about the key drivers of REO sales to consumer households. This study addresses this gap by exploring the links between property, property location and neighborhood characteristics and REO sale activity. Using a dataset of property transactions, this study determines the characteristics of REO properties that become occupied by households and REO properties that remain vacant. A spatial logit model is employed that differentiates between bank- or investor-purchased homes and homeowner-purchased REO homes. Explanatory variables include the time spent on the market and the block group-level neighborhood characteristics, such as the recent foreclosure rate, as well as the housing cost and transportation cost variables as determined by the Location Affordability Index. Pfeiffer and Molina (2013) found that households in Los Angeles purchased REO homes in neighborhoods with a relatively high potential for economic mobility. As such, it is expected that block groups that are affordable and have relatively low foreclosure rates will be popular for individual households purchasing REO properties. The results will point towards the relative affordability of neighborhoods that experience REO purchases by individuals and not institutions, and will indicate opportunities for expanding access to homeownership in neighborhoods with more affordable homes.

References

Abstract Index #: 301
COMMUNITY BENEFITS FROM DEVELOPMENT: DELIVERING FOR HOUSEHOLDS IN POVERTY

Exacting community benefits from development can have important implications for distributional equity, social justice and pathways into employment for disadvantaged households (Parks and Warren, 2009; Wolf-Powers, 2010). In countries like the UK, ‘planning gain’ and development taxes are increasingly covering the costs of infrastructure that would previously have been paid for by the state (Campbell et al, 2000). As municipalities with buoyant land markets can extract more than areas of low demand and market failure, the net impact is to reflect and reinforce growing socio-spatial inequalities. The ability of municipal governments and communities to support effective local employment/hiring, training and skills obligations is also likely to be affected by concerns about development viability and the reduced capacity within disadvantaged communities to provide the institutional support to overcome barriers to employment. Competitive pressures, state fiscal austerity and neoliberal pressure to reduce the ‘regulatory burden’ of planning, would all appear to constrain the power of municipal authorities to lever community benefits from development (Peck and Tickell, 2010).

This paper draws on in-depth policy research funded by the UK Joseph Rowntree Foundation to examine and reflect on the politics of leverage in relation to community benefits for places and people in poverty. The research includes an extensive evidence review, a detailed study of 20 development projects across 4 municipal authorities, and over 50 interviews with key stakeholders at local and national levels. A number of arguments are made in the paper. First, questions are raised about the inequitable distributional outcomes that follow when...
localised planning gain is intended to cover for shortfalls in state provision. Second, literature on Community Benefits Agreements in the US has demonstrated the importance of local political mobilisation for social justice outcomes, including the role of local government in negotiation and implementation (Wolf-Powers, 2010). The paper charts the growing confidence of UK municipal authorities in exacting local employment and skills agreements from major development projects over the last 5 years. This is traced to local political activism and the incorporation of local hiring as part of the necessary portfolio of corporate social responsibility for firms and contractors. In the UK the Public Services (Social Value) Act of 2012 has partially rolled back prevailing neoliberal policy to allow municipal authorities to give greater weight to community benefits in local procurement. Local employment and skills agreements can also lever in additional national state funding. Third, the paper develops a framework for considering the various ways in which community benefits might be maximised for households in poverty. In doing so the paper highlights the opportunities for proactive intervention, but also examines serious challenges in making community benefits work for places and people who are most in need of additional support. This is shown to be about the politics of state leverage in relation to planning gain and community benefits, but it is also about the capacity of municipal governments and communities to assemble the personalised labour market support needed to overcome barriers to work.

Overall the paper seeks to make a distinctive contribution to the theory and practice of community benefits policy that draws on empirical research in the UK but also speaks to experience in North America. More broadly, the research provides further evidence of the correlation between neoliberal (re)distributions of regulatory power and growing socio-spatial inequality. The paper considers the meaning of recent changes in the UK for broader trajectories of neoliberalisation and the politics of hope.

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Abstract Index #: 302

AN INVESTIGATION OF THE RESIDENTIAL LOCATION, LIFESTYLES AND MOBILITY CHOICES OF MILLENNIALS IN CALIFORNIA, AND THE MOTIVATIONS AFFECTING THEM

Abstract System ID#: 940
Pre-organized Session: Broad Scale Impacts of Millennials in the City

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Recent research suggests that per-capita car travel seems to have “peaked” in recent years in the United States as well as in other developed countries (Sivak, 2014). Young adults (“Generation Y”, or “Millennials”), in particular, have demonstrated a rather drastic modification in their lifestyles and travel behavior. Among the observed changes, younger travelers tend to postpone the time they obtain a driver’s license, often choose to live in more central urban locations and choose not to own a car, drive less even if they own one, and use
alternative non-motorized means of transportation (Blumenberg et al., 2012; Kuhnimhof et al., 2012; Frändberg and Vilhelmson, 2011).

Several possible explanations have been proposed to explain the observed behavioral changes of young adults, including their preference for more urban lifestyles and locations closer to the vibrant parts of a city, the changes in the household composition (e.g. postponing marriage and procreation), and the substitution of travel for work and socializing with telecommuting and social media (Polzin et al., 2014). However, the debate in this field is often dominated by speculations about the potential factors affecting millennials’ behavior. Several studies have started to investigate the residential location and mobility choices of millennials through the analysis of disaggregate data, but they are often limited by either the lack of information on specific variables of interest (such as personal attitudes and preferences, in the case of studies based on the analysis of National Household Travel Survey Data), or by the use of non-random samples (such as convenience samples drawn from university students).

This study investigates the relationships among millennials’ residential location, lifestyles, travel behavior patterns, their aspirations to purchase (and use) a vehicle, and the motivations behind them, through the analysis of behavioral and attitudinal data collected with an online survey, created as part of the project, which is distributed to a sample representative of the population of young adults in California. The study investigates the impact of both classical (e.g. economic activity and land use patterns) and non-classical (e.g. personal attitudes and preferences, adoption of technological solutions and new transportation modes, etc.) variables on the lifestyles, residential location and mobility choices of young adults. We collect information on personal attitudes and preferences (as they relate to social habits, lifestyles, adoption of technology, environmental concerns, exercise/physical activity, etc.), transportation-specific attitudes (about mode perception, comfort, time flexibility, etc.), interaction with peers and their expectations (i.e. peer pressure or societal pressure), engagement in face-to-face and online social activities (and their role in shaping participation in activities and travel for young adults), cultural background, commute behavior, limitations to travel (physical disabilities, availability of a private car or bike, access to public transportation, availability of car- and bike-sharing, ride-sharing services such as Uber, Lyft, etc.), residential location (urban vs. suburban, rural areas, neighborhood type, dwelling type, etc.), propensity to purchase a vehicle, and socio-demographic traits.

The study provides important insights into the role of several factors affecting the lifestyles, residential locations and mobility-patterns of millennials in California. This paper presents preliminary results from the analysis of the California’s dataset, and discusses the potential impact of millennials’ lifestyles and choices on the growth of Californian cities and future demand for transportation. Future extensions of this multiple-year research program will expand the study to other states in the United States, and internationally, through the comparison of the information collected in this dataset with the data collected for other regions.

References

While urban congestion and housing affordability pressures afflict the world’s major cities, spare capacity within existing dwellings and transport systems lies untapped. Proponents of the burgeoning “share economy” claim the movement can address these problems, by releasing latent space within existing homes and vehicles through services such as Airbnb (short term accommodation) and Uber (ridesharing) (Hirschler and Zech, 2014). However, there are growing questions about potential impacts on local housing supply, neighbourhood amenity, and public safety, and very little scholarly research on the implications for urban policy and planning. This paper addresses such questions, examining the so called “sharing economy” and its manifestation in cities through a range of practices which might collectively be termed “shared urbanism”. First, the paper develops a typology of shared urbanism across accommodation, transport, energy, food, services, and other sectors, highlights potential implications (opportunities, risks) for urban policy and planning frameworks, and draws on the emerging practice literature (Sharable, 2013) to outline the range of regulatory responses that are emerging on the ground. Second, the paper applies this framework to examine the specific case of Airbnb, an online “peer to peer” (as opposed to “business to customer”) platform for short term accommodation within homes rather than hotels. Within five years, Airbnb has grown to rival the world’s largest hotel firms in terms of capital value and accommodation provision (Zervas et al., 2014), yet its assets remain dispersed and virtual, and its business model depends on the willingness of strangers to lend/borrow their homes/rooms. While the company claims that the model helps “hosts” afford their rents or mortgages, and brings local economic development to suburban neighbourhoods, critics argue that Airbnb listings displace permanent accommodation in high demand cities and disrupt residential amenity (New York State Attorney General, 2014). This paper examines these issues, examining Airbnb listings in two global cities affected by chronic shortages of affordable housing – New York and Sydney. Using listings data obtained via webscraping techniques, the paper examines 1) the ratio of permanent to Airbnb accommodation listings in both cities; 2) listings of whole apartments/homes, versus single rooms; 3) the number of multiple listings by a single “host”/landlord; and 4) permanent versus episodic availability of listings. The analysis suggests that platforms such as Airbnb may offer new opportunities for releasing spare capacity within the existing housing stock and offer flexible sources of income to help renters and first home buyers, but that a strong policy framework for monitoring impacts on the supply of lower cost permanent rental accommodation is needed in high demand locations. Understood within the spectrum of emerging shared urbanism practices, and situated within a strategic urban policy framework for maximizing the benefits and minimizing risks to safety and residential character, the emergence of platforms such as Airbnb and more tailored services targeting international students or seasonal workers, may offer new opportunities to address housing pressures in suburban settings too, potentially supported by other sectors of the shared economy. However, rigorous, evidence based research on the urban implications of these practices is needed to counterbalance claims made by proponents of the $15 billion (Price Waterhouse Cooper, 2014) global enterprise.

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The twin issues of GHG emission reduction and housing affordability have long been seen as the key opportunities and challenges of transit-oriented development (Cervero & Murakami, 2010; Freeman & Braconi 2007; Duncan, 2011). The transport sector GHG emission reduction framework established by California’s Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375) has spurred a wave of research on transit oriented development (TOD) by advocacy organizations, government entities, and academics. Los Angeles’ evolving rail transit system will transform neighborhoods and travel patterns in the city, and linking TOD plans to Los Angeles’ current housing crisis is a pressing need (Logan, 2014).

Los Angeles has begun to tackle these issues through a major investment in transit, with a particular focus on light rail. The Los Angeles County Metropolitan Transportation Authority (L.A. Metro) anticipates spending 58 percent of all funds on transit between 2005 and 2040 (L.A. Metro, 2009, p. 23). But planning for affordable and environmentally sustainable housing near rail stations has lagged. Against this backdrop, we ask two policy questions: (1) How can development near rail stations best produce environmental benefits, particularly benefits consistent with state greenhouse gas emission reduction goals; and (2) How can development near transit provide affordable housing without compromising on its transportation goals?

Our paper takes a scenario-based approach in addressing these questions. We will first develop model development scenarios based on expert opinion regarding optimal development patterns, knowledge of the Los Angeles context, and a consideration of widely-recognized policy instruments for achieving both environmental and affordable housing goals, including incentive zoning, amended parking requirements, and subsidies. We will then link these scenarios to GHG emission reduction by estimating the relationship between affordable housing and vehicle miles traveled (VMT) using the most recent travel diary data for the LA region – the 2012 California Household Travel Survey (CHTS). Together, these elements can produce station area templates to aid local and regional planners in policy selection and station-area plan preparation.

References
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The American with Disabilities Act (ADA) marks a significant change in policy. However, that does not automatically mean change is seen immediately or without challenges and misunderstandings, especially as those unfamiliar with the disability movement or the needs and issues affecting people with disabilities, including planning practitioners, researchers and educators. As a result, ADA has had varying degrees of impact and success. Changing policy and practice, whatever the focus, can be slow, incremental and uneven. A goal of the ADA PARC project is to work through and with the ADA centers to identify and address disparities. ADA Centers are critical players in providing information, guidance and training on the ADA. They work with businesses, government and individuals at local, regional and national levels. This paper will first review literature on systems change as it relates to ADA, including key policies pertaining to people with disabilities since 1990. The empirical analysis will focus on the work of ADA centers and their collaboration with key stakeholders to show how they can and are using the findings from the ADA PARC project to 1) identify key disparities in community living, community participation and work and economic participation experienced by citizens with disabilities, 2) act upon findings to make meaningful community and system change to address them. This includes thinking about who to involve, at what scale(s) the collaboration should be operating and how each goes about determining the issues to focus on. The paper will conclude with a discussion of common challenges and recommendations for planning practitioners, educators and researchers.

Abstract Index #: 306

SCHOOL CONSOLIDATION AND ITS DISCONTENTS TO THE NEIGHBORING COMMUNITY: THE CASE OF SHUTTERED SCHOOLS IN VILLAGE OF KENMORE, NEW YORK

Abstract System ID#: 1066
Individual Paper

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This paper will investigate the recent case of school consolidation and school closure in Kenmore-Tonawanda School District (Ken-Ton) and it’s effect on the nearby community and housing. Ken-Ton serving the Village of Kenmore and City of Tonawanda, New York. The plan stipulates shuttering of a middle school and an elementary school, only district schools located within the village of Kenmore. The residents and the village government have been critical of the closures, citing disenfranchisement and loss of collective identity. Focusing on the complex dynamics of the lengthy public process leading to the consolidation plan, the paper will explore the impacts of the school closures on the spatial makeup of the village and the community. At the tail-end, I will propose several possible scenarios to maintain the neighborhood quality and address the community concerns. The research was conducted by qualitative approach utilizing content analysis method, as part of the research conducted in the Architecture of Public Education course.

The population of the Town of Tonawanda, including the Village of Kenmore, plummeted by 31 percent from 1970 to 2010, from 107,000 to 73,500; and the school district enrollment has dropped nearly 20 percent since the 1994-95 school-year. A consultant team hired by the district to came up with four scenarios of consolidation in response to decreasing state funding and enrollment. Slated to commence in the 2015-2016 school-year, all four consolidation plans would close Kenmore Middle School, one of the oldest buildings in the district. Three of the plans would close Roosevelt Elementary, also located in the village of Kenmore. The school district is currently finalizing the attendance zones.

To close two schools in the same community will effectively take the Kenmore out of the Ken-Ton School District; and the Village Board believes that closing a second school in Kenmore would be detrimental to the village. Named one of the “Top 10 Great Neighborhoods” in the United States by the American Planning Association in 2009, for its historic architecture, walkable design, accessibility, functionality, and for its community involvement;
loss of a neighborhood elementary school is a major blow. Given the expanding school attendance zones, pupils have to be transported to schools outside the village and their neighborhood.

Ken-Ton School District Board conducted a series of public forums with the community to discuss all consolidation scenarios. There is general agreement that the public has been relatively effective and gave voice to different opinions. Current schools had been housing community services for the neighborhood, and it had become the neighborhood anchor. The study regarding to school closure had been conducted by Taylor (2014), showing how the shuttered school become the zombie-schools and bring negative effects to the nearby neighborhood in Buffalo, the city bordering the Kenmore Village. From the perspective of the housing community, Silverman (2014) also argued about anchoring community development to schools and neighborhood. Therefore, good recommendations of the study would maintain a presence of the historic building utilized for education purposes facility as identity of the village and propose alternative uses for the school building to maintain the neighborhood quality and anticipate the concerns of spatial justice for the community.

References
Residential mobility decisions have been identified in previous studies and most factors that affect the decisions were socio-economic characteristics of households and living environments. One of the important factors that determine residential mobility decision is satisfaction level with the current neighborhood and home (Clark, Deurloo & Dieleman, 2006; Clark & Ledwith, 2006). Although there are abundant research on the residential mobility decisions, there are few studies about the different elements associated with moving intentions of movers and non-movers (Woo & Morrow-Jones, 2011). Moreover, the residential mobility studies by using a multi-level analysis has very scant empirical evidence.

This study examines the factors that increase the likelihood of moving decisions and intention both by their socio-economic characteristics, environmental conditions, and satisfaction level on housing/neighborhood in Franklin County, Ohio of U.S. in 2004. This study extends the earlier studies to explore the different features between the non-movers and movers who actually moved within 2 years after the survey conducted. Both movers and non-movers had higher level of satisfaction on their current neighborhoods and home but we also found something different facts from the descriptive analysis. Movers’ age has bigger variances, live in older/cheaper/smaller housing, also live in neighborhoods with less opportunities on education, job access, public safety, affordable housing, accessibility to shop, public health, and affluent neighborhood.

In future work, we apply multi-level analysis to explore how the level of intention to move are expected to be different by geographical levels, individual households (level 1), neighborhoods and school districts (level 2), and they are also similar within the same groups due to the cluster effect. Therefore, the multi-level modeling is applied for non-movers (667 responders, 85.29%) and movers (115 responders, 14.71%) using the survey data collected by Center for Urban and Regional Analysis in the Ohio State University in 2004.

References

Abstract Index #: 309
EXPLORING THE EFFECTS OF HOME ENERGY ASSISTANCE FOR LOW-INCOME FAMILIES
Abstract System ID#: 991
Individual Paper

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Cities are faced with the rising challenge of providing affordable housing and improving access to opportunities for low-income residents. Recent attention has examined the effects of living in wealthy or poor neighborhoods, while overlooking the influence of housing environments (Briggs et al., 2010). Additionally, traditional housing assistance focuses on rent, but families must also pay for other housing costs including utility expenses.

This research explores the relationship between home energy assistance programs and housing conditions for low-income families. Theory and previous work suggest that residential stability and conditions are important for a range of outcomes, including physical health, emotional well-being, and social ties (Anderson et al., 2014; Newman, 2008). This paper addresses the following questions: (1) What are the effects of home energy assistance on residential stability? (2) Does home energy assistance have positive impacts on health?
I use multivariate analysis, including a regression discontinuity design, to compare similar households who differ in their probability of participating in the program. I find that home energy assistance has a positive effect on families staying in their homes. In addition, I find evidence that home energy assistance is associated with reduced medical costs. The results have implications for new ways of integrating affordable housing, energy use, and community health.

References


Abstract Index #: 310
CREATING INDEXES TO UNDERSTAND DISABILITY DISPARITIES AT DIFFERENT SCALES
Abstract System ID#: 998
Pre-organized Session: ADA PARC

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The ADA PARC project brings together data used in community planning, public health, environmental studies, and disability studies to better understand disparities in community living, community participation, and economic participation at different scales – nation, state and selected cities. While the mapping out of these data provides a rich visual and empirical base for identifying issues and for discussion of strategies to employ locally, it does not necessarily provide a firm baseline for understanding how well overall a jurisdiction (state or city) is doing when it comes to community living, community participation and economic participation. A goal of the ADA PARC project is to provide tools that can be used to identify policy questions as well as to monitor change over time as new strategies and policy are implemented. To this end, a set of indexes have been developed that can be used to benchmark and score geographies along dimensions of community living, community participation and economic participation. Benchmarking allows comparisons to be made between groups as well as over time. Using nationally available data, we produced and tested a set of indexes using various approaches including simple scorecard, weighted and other composite measures. These data were assessed for covariance and other measures and the indexes were tested for robustness, and risk ratios were generated. This paper will begin with a review of the literature on index development and benchmarking and how each can be used in planning and policy making. The indexes developed for the ADA PARC project will be reviewed to demonstrate specific strategies, logic and techniques used. Implications for further research and potential use in policy and planning arenas will be discussed.

Abstract Index #: 311
INTENTIONAL COMMUNITIES AND THE DIGITAL AGE: PARTICIPATION AND AUTHENTICITY IN LAS VEGAS' DOWNTOWN PROJECT
Abstract System ID#: 1003
Individual Paper

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From the start, various groups in what is now the United States have formed “intentional communities” based around shared visions. At key moments in the country’s development, these utopic visions, with their emphasis on egalitarianism and authenticity, have taken on greater importance and visibility. In modern America, perhaps
the greatest concentration of intentional communities emerged from the tumult of the 1960s, responding to the nation’s social revolution. Political communes and cults proliferated, and individualistic “New Communalists turned away from political action and toward technology and the transformation of consciousness as the primary sources of social change” (Turner 2006, p. 4)

How do participation and authenticity manifest in intentional communities of the digital age? To answer this, I conduct a case study of a current-day descendant of the New Communalists, Las Vegas’ Downtown Project (DTP). DTP was initiated in 2012 “to transform Downtown Las Vegas into the most community-focused large city in the world...by inspiring and empowering people to follow their passions to create a vibrant, connected urban core” (Downtown Project, 2015) Funded by Zappos CEO Tony Hsieh, the development’s much-beloved “guru,” DTP has all the principles or elements of an intentional community (Miller 2010). First, residents coalesce around a shared vision they believe to be beyond the mainstream. DTP residents embrace Hsieh’s “delivering happiness” philosophy, the belief that the prioritization of happiness in one’s own work and life has multiplier effects in the world at large. Next, the group members live on a bounded property with a cohesive design. DTP’s real estate investments comprise the purchase of existing properties, and purposively or not, together they mimic the shape of Hsieh’s most admired animal, the llama. And finally, DTP’s very raison d’etre is economic: it aims to position Las Vegas as among the country’s most vital tech startup hubs.

I argue that DTP grapples with two critical contemporary planning issues: digital participation and planning “authenticity.” First, in accordance with its tech startup utopianism, DTP has a robust online presence, including a dedicated website, various social media outlets, even a smartphone app. But do they offer genuine participation? Second, related to the concept of authenticity, DTP’s identity as real estate development and technophilic idyll exemplifies the “politics of ambivalence” Banet-Weiser (2012) sees when “both economic imperatives and ‘authenticity’ are expressed and experienced simultaneously” (p. 5). Do DTP’s online platforms demonstrate this ambivalence? How? Are efforts made to negotiate it?

Starting in December 2013 and continuing on a bimonthly basis through August 2014, I extracted all DTP-produced new media content for constant-comparative-directed content, visual, and discourse analysis. Using this cache, I analyze how DTP participants use different emergent media to promote the project, how they perceive the project internally, and whether online participation appears to direct the project’s larger processes. In addition, I code mentions of authenticity, the media used to convey it, individuals and businesses represented, and the strength of consumerist messaging. Finally, I interview DTP stakeholders and conduct further content analysis of contemporaneous press coverage to glean the community’s regard for participation and peculiar brand of authenticity.

Current urban renewal projects bear some of the hallmarks of intentional communities, and this research on DTP provides useful lessons for planning. It interrogates to what extent online engagement, even amongst the willing, equates to genuine participation in planning. By tracking the construction of “authenticity,” it reflects when and how economic imperative supersedes social agenda. Are our egalitarian utopias egalitarian at all? Or are they libertarian, pro-capitalist enclaves?

References

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There is a long history of examining leadership—from Plato, Socrates, and Aristotle, progressing to Weber, Machiavelli and others—and although the literature on this topic is quite vast, basic questions have centered around: what characterizes a leader, their motivations, approaches, effectiveness, and decision-making processes (Burns 2010; Bass and Riggio 2005). Leadership, as opposed to management or delegation, is predisposed to addressing “wicked problems” for which no cause or effect could be determined and where scientific methodologies prove partial and cursory in their results (Rittel and Webber 1973). The following paper will evaluate the importance of collective and egalitarian decision-making in addressing complex social problems that cannot resolved definitively (Grint 2010). More specifically, in the field of planning, I engage with recent scholarship that has come to emphasize the importance of leadership to effectively address the needs of communities and implement strategies that result in desired long-term changes (Forester 2013).

Research findings are based on 17 oral histories of Puerto Rican leaders in the context of Chicago working in the field of community development. Based on the findings of the study, interviewees assumed leadership roles because of a specific social context they experienced. For example, they spoke about developing a deep concern for the socio-economic conditions of minorities in the city of Chicago after experiencing poverty, discrimination or sexism first hand. These leaders usually shared stories of struggle, resiliency and awakening—becoming empowered and deciding to change the system. Interviewees emphasize the idea of relentlessly following a general path rather than a concrete goal. The path would become clearer as time went by as long as they pursue this more abstract vision of the future and encourage others to do the same.

Interviewees suggest a path-dependency approach in planning—as many leaders spoke about one opportunity leading to the next and so forth, about making mistakes and learning by trial and error. Another element these leaders emphasized is how they learned to think collectively, ask for help, recognize others, listen and use ingenious knowledge to solve the problems at hand. This article also seeks to move from individual leaders to formulate a theory for the collectivization of leadership. Finally, the paper will conclude with some recommendations regarding leadership development in community-based practice. This research is part of a large-scale effort of the Center for Puerto Rican Studies to document in video form the oral histories of 100 Puerto Ricans who have made a difference in their communities across the United States.

References

Prior research has extensively evaluated the efficacy of subsidized low-income housing programs in deconcentrating poverty as well as their influence on both households and communities. However, very few studies have explored the extent to which these housing programs have affected the hazard exposure of vulnerable populations (e.g., Cutter et al. 2001; Houston et al. 2013). This paper hypothesizes that by ignoring the multi-hazard context of urban areas, subsidized low-income housing programs have failed to reduce the overall hazard exposure of socially vulnerable populations and to some extent, have contributed to an increased level of hazard exposure. Similar to other large U.S. cities, Houston also faces environmental justice challenges as a result of disproportionately placing technological hazards (e.g., polluting facilities) in areas occupied by lower income groups and non-whites (Bullard & Wright, 1993; Chakraborty et al., 2014). The process through which this uneven geography of hazard exposure is created and maintained needs to be better understood, particularly within a multi-hazard coastal environment like Houston and as the impacts of climate change and adaptation planning continue to gain attention from planning scholars and practitioners (Blanco et al., 2009). By examining two of the most popular housing subsidy programs, Housing Choice Vouchers (HCV) and the Low Income Housing Tax Credit (LIHTC), this paper explores the ways in which these housing subsidies influenced neighborhood social vulnerability in Houston between 2000 and 2010. Both natural and technological hazard exposures are measured at the census tract level using publicly available data from the U.S. Environmental Protection Agency (EPA) and Federal Emergency Management Agency (FEMA). Both of these housing programs were found to have contributed to a disproportionately high (relative to the overall population) presence of subsidized low-income housing units in both natural and technological hazard areas. However, the results of the spatial econometric analysis indicate that the supply-oriented subsidy provision of the LIHTC program significantly increases neighborhood social vulnerability when located in technological hazard areas. These findings warrant more careful scrutiny by planners when placing subsidized housing, particularly how administrative decisions like these may influence the hazard exposure of vulnerable populations and exacerbate environmental justice issues. Finally, the limitations of market-oriented housing programs that lack adequate safeguards for avoiding hazardous areas are highlighted and potential remedies are suggested.

References


Abstract Index #: 314
Immigrants Shared First: Old Problems and New Regulations in the Urban
Abstract System ID#: 1033
Individual Paper

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Recently, new profitable models of "sharing" have emerged in many US cities. The efforts of companies that facilitate the sharing of housing (airbnb) and travel (uber/lyft) first were applauded for being creative, clever, and much more efficient and pleasant than the traditional options. Many comparisons were made that highlighted the benefits of casually linking hip, creative, young and interesting people, who happened to be doubling as landlords and car drivers, with other hip, creative people who happened to be looking for a place to stay and a "lift" to somewhere. And yet, much of what was being sold or "shared" in newly digitized packages through home-sharing websites and mobile apps, is actually an old practice. In fact, in most of the same cities where airbnb and uber have become popular and lucrative, are almost identical practices among poor people, immigrant people, and other people of color: homesharing, ride-sharing, informal lending out or renting out of cars and rooms.

Previous research finds that immigrant subsistence and governance strategies have largely been rendered invisible and if not, criminalized (Valenzuela 2001; Morales 2009). Furthermore, while immigrant practices are often penalized, the new models of the sharing economy have had significant impacts on organized labor, much of which also supports immigrant service workers. The loud campaigns for regulation and equally loud arguments against regulation of these new creative sharing models and their existence alongside organized labor raises significant questions around the contributions of immigrant economies, immigrant forms of organization, and political power. This article examines how previously villianized immigrant practices can also be seen as viable, replicable, and sustainable in the same way the new sharing economy has been popularized in the media. This research broadens the current policy and planning debates on the sharing economy to include historically viable yet marginalized communities and practices while also contributing to research on economic development in minority communities.

References

Abstract Index #: 315
THE MULTIPLE MEANINGS OF BLIGHT FROM INJUSTICE AND SOCIAL DISORDER TO RECLAMATION OF VACANT PROPERTIES AND URBAN REGENERATION.
Abstract System ID#: 1040
Roundtable or Informal Discussion Session

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Blight is a complex term with a long and contested past. Blight offers a shorthand way to visualize neighborhood decline through the lens of vacant lots, abandoned buildings, graffiti, unsafe streets, etc. Blight can also serve as the legal grounds for redevelopment projects where the use of eminent domain imposed disastrous consequences for many communities of color through the urban renewal era. Social scientists and public health experts analyze the relationship of physical and social disorder with crime under the infamous rubric of the broken window theory.
Recently a growing number of cities have launched anti-blight campaigns and blight remediation initiatives—giving blight a new frame—to address the proliferation of vacant and abandoned homes caused by the cumulative effect of long term postindustrial decline, shrinking population, and the mortgage foreclosure crisis. In 2014 Detroit gained nationwide attention for the release of its Blight Remediation Framework. New Orleans’ Blight-Stat pioneered the use of data and performance measures to track blighted properties. NGOs such as the Center for Community Progress and Pennsylvania Housing Alliance regularly convene practitioners and policymakers to share best places and advocate for policy changes to help communities tackle blight.

This roundtable will explore the multiple meanings of blight research and contemporary practices, covering such topics and questions as: What are the latest methods for tracking the costs and impacts of blight? As a socio-economic phenomenon, is blight the cause or the symptom of broader socio-economic phenomenon, such as poverty and racial injustice? How do communities, planners, and policymakers develop effective policy strategies and legal tools to address blighted properties?

In March 2015 the Vacant Properties Research Network released a national literature review on blight drawing together over 300 academic literature and practitioner reports (85% since 2000) to systematically assess the nature of blight, the effects, and the factors that have shaped its development and how the meaning of blight shifts with the times and the place. The discussants will highlight this lit review’s key findings and compare it with policy and practices in Texas. This session will focus on the legal, policy, and planning dimensions of nuisance abatement in the reclamation and reuse of vacant properties—perhaps the most recent and pervasive manifestation of blight.

References

Abstract Index #: 316

GETTING OUT OF THE HOOD: EVALUATING THE ECONOMIC AND SPATIAL MOBILITY BENEFITS OF THE FAMILY SELF-SUFFICIENCY PROGRAM

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Background: When the U.S. federal public housing program was created in the 1930s, it was envisioned that public housing would provide low-cost and reasonable quality shelter to needy families for a short period of time (Hayes 1995). Assisted families were expected to improve their economic status and leave public housing. However, since the 1970s, it was evident that many families that received housing assistance stayed on it (Hayes 1995; Rohe & Kliet, 1997; Sard, 2001). And over time housing assisted families became concentrated in low-income, low-opportunity neighborhoods.

Family Self-sufficiency (FSS) programs are designed to help housing-assisted families to transition to economic self-sufficiency, become independent of housing and welfare assistance, and seek rental and ownership housing in the private sector. The creation of FSS programs marked a fundamental shift from low-income housing policy's
traditional focus on getting families into housing projects or on housing assistance programs (Nenno, 1991). In 2013, over 80% of local housing authorities in the U.S. had an operational FSS program.

The research reported in this paper examined a) whether FSS program graduates were better-off financially than those that were not, and b) whether FSS program graduates were able to relocate to better neighborhoods in the private housing market.

Relevance of this research: The problems associated with spatial concentrations of poverty are well-documented (Rainwater, 1980; Wilson, 1987). None of the large-scale federally supported housing assistance programs in the U.S have thus far had significant success in spatially dispersing assisted families. There have been several limited scale, housing mobility programs such as the Moving-To-Opportunity program. These too have had limited success in enabling assisted families move to higher opportunity neighborhoods. But FSS program graduates can search for both rental and ownership housing in the private market without the stigma of being “government aided” and without the restrictions that government aid comes with. For the first time in the history of federal housing programs, a concerted effort is underway to help low-income families make housing choices in this unfettered way. FSS programs can thus enable low-income families living in concentrated pockets of poverty either in housing projects or Housing Choice Voucher supported housing to relocate to better neighborhoods. But whether FSS programs actually do so has never been examined.

Research Design: The research examined program graduates of one FSS program – the City of Clearwater, Florida’s Partners in Self-Sufficiency program. I used individual and family data in a pre-test/post-test quasi-experimental research design with control groups. The research questions that guided this study were:
1. Do FSS program graduates find ownership or rental housing in the private sector in dispersed locations away from spatial concentrations of poverty?
2. What factors correlate with success in the FSS program with success defined as a) graduating from the program and b) moving to a “better” neighborhood?

Data: Detailed demographic data was made available by the FSS program administering agency. This included information on age, family size, income, residential address, rent or mortgage payment, and educational skills.

Methodology: Multiple logistic regression techniques are well suited for analysis of categorical data and were used in this research. To eliminate alternate hypotheses and control for labor and housing market effects over the duration of the quasi-experiment a control group was used.

References

Abstract Index #: 317
IRRATIONAL EXUBERANCE AT CITY HALL? HOUSE PRICE GROWTH AND LOCAL GOVERNMENT SPENDING
Abstract System ID#: 1050
Individual Paper
Local governments were hit hard in the Great Recession, as real property tax revenues fell and states cut back on local aid. Importantly, the housing boom may have led many local governments to make overly optimistic spending decisions intensifying the recession’s impact. City revenues are exposed to rising home prices through a number of channels including, most rapidly, real estate transfer taxes and property related fees. In this paper, we estimate the extent to which local governments consumed were spurred by out of the dramatic increases in housing wealth that occurred in many jurisdictions during the housing boom to increase spending.

We have constructed several sets of house price indices for thousands of cities across the country, and appended data from three waves of the U.S. Census of Governments. Using these data, we run a set of models informed by the literature on the marginal propensity to consume out of housing wealth and public finance, acknowledging the differences between households and local governments. Importantly, we control for local characteristics such as economic base and access to different and flexible revenue sources. We also exploit variation in the use of real estate transfer taxes.

Producing subsidized affordable housing through Low Income Housing Tax Credits (LIHTC) requires a number of relationships and transactions. Since the program was established, these transactions have become less risky and relationships more secure. Research has also shown that LIHTC projects often generate positive effects for neighborhoods. However recent research has also shown that in one case, the LIHTC system functions as a contradictory affordable housing complex (AHC) that mobilizes subsidized affordable housing to facilitate the interests of developers and politicians rather than increasing affordability.

This paper builds on a case study of LIHTC housing production in Santa Ana, California, from 2008 to 2014 and uses spatial analysis, participant observation, surveys, and interviews in order to: 1) to shed light on the actors and relationships that help produce and regulate the complex; 2) to understand the conditions and rent burdens on residents in LIHTC projects; and 3) to better understand the impact of LIHTC projects on neighborhood property values. Through in-depth and semi-structured interviews with key actors including property owners, real estate agents, and both for profit and nonprofit developers, as well as surveys of residents in LIHTC projects, this research takes a more intimate perspective on the complex set of relationships and interests that significantly impact low-income residents, housing, and neighborhood conditions.

References
Abstract Index #: 319
POSSIBILITIES FOR LOW-INCOME HOME REPAIR PROGRAMS AS A LEVERAGE POINT FOR ENVIRONMENTAL JUSTICE IN GENTRIFYING URBAN ENVIRONMENTS
Abstract System ID#: 1098
Individual Paper

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Central Theme: Our home environments pose a number of challenges for environmental justice. Healthy homes in healthy neighborhoods are often inaccessible due to socioeconomic factors (Hood, 2005), environmental racism (Bullard et al., 2007), and/or environmental gentrification (Banzhaf & McCormick, 2006). Publicly funded home repair programs increasingly strive both to improve environmental health conditions and to reduce energy bills at the household level. Home repair programs have also been implemented to stimulate reinvestment at the neighborhood-level (Whalley, 1988). More recently, the City of Austin has invested funds in home repair programs to ensure that low-income homeowners can enjoy healthy, safe, and energy efficient home environments in the face of gentrification pressure. While such programs do not represent a silver-bullet solution to the accessibility of healthy housing, the question remains: “what is the potential of low-income home repair programs to serve as a leverage point for environmental justice in urban home environments facing gentrification pressure?”

Methodology: To address this question, I conducted performance evaluation case studies of three municipally funded, low-income home repair programs in Austin, Texas intended to ameliorate gentrification and advance outcomes related to environmental justice. Two programs were designed for one neighborhood that experienced environmental racism in its past and currently faces environmental gentrification. Case studies included participant observation of home repair programs, key informant interviews with program leaders, and 104 interviews with homeowners who received services (including 33 semi-structured, dialogue interviews in which homeowners shared detailed accounts of their experiences of home repair, patterns of inhabitation, and perspectives on neighborhood change).

Relevance: The results have important implications for planning practice and scholarship. With regard to the design of home repair programs, results suggest that while Return On Investment (ROI) and energy savings are important, they can be counterproductive as singular performance goals. Such narrowly framed goals can contribute to a fragmented approach to home repair with missed opportunities for integrated health and environmental performance enhancement at multiple scales. Furthermore, a holistic conception of environmental justice (including distributive equity, procedural justice, recognition, and capabilities (Schlosberg, 2009)) as a goal appears to support the design and implementation of programs with higher performance at the household and neighborhood levels. Similarly, results from the dialogue interviews suggest that the underlying frames through which households view their home environments is a significant (yet often overlooked) driver of home performance. A key finding is that “regenerative dialogue assessments” of homes before and after home repair can reveal (and potentially shift) such frames, augment capacity for adaptive home management, and advance holistic intervention design. Such assessments engage both the technological and social systems of the home environment in order to advance health and ecological performance.

References
DOWNTOWN REDEVELOPMENT PLANS: ERASING & IMAGINING COMMUNITIES

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There is a budding attraction of U.S. city officials and urban elites in “bringing back” creative and middle class populations to urban downtown cores. These downtowns were previously all but abandoned by government and the private sector for over half a century and where ethno-racial and working-class populations have since largely been shopping and living. In many cases, current scholarship on commercial gentrification stems from these processes. Yet, missing from this body of work is a critical discourse analysis of the extent that downtown urban development plans address class and cultural aspirations of Mexican, immigrant, and working-class consumers when they were the majority immediately after the 1960s civil rights era and in the more present time while undergoing gentrification. Using the Southern California City of Santa Ana, this paper examines two downtown development plans from two distinct time periods, 1974 and 2007, using discourse analysis. The paper’s first objective is to briefly review the similarities and differences of factors driving the need for downtown redevelopment and generating controversy. The second objective is to explore the extent that the 1974 Downtown Santa Ana Development Plan (DSADP) and the 2007 Santa Ana Renaissance Specific Plan (RP) address cultural and class commercial needs and aspirations of the majority Mexican community. As a whole, the DSADP overwhelmingly promoted the Mexican community as a problem—delinquent and illegal and overwhelmingly erased it as a target for downtown consumption, while the RP not only erased it as a target consumer, but also promoted the community as both a problem and an asset, and neutralized it. We conclude that regardless of time period, urban planning discourse remains much the same—largely inattentive to rights to the downtown for the most marginalized. Moreover, present day planning mechanisms, such as form-based codes/physical design and creative class programming help construct, privilege, and bring back a reimagined community.

References

The cities of the 21st century are multicultural and diverse, with spaces that provide a variety of uses and services for its inhabitants. The urban public and green spaces in the city provide social and ecological services such as recreation, improving public health, reducing energy costs and improving the general environment of the communities (Atiqul Haq 2011). The public and green spaces in the cities are relevant in developing a livable city as they provide both social and psychological benefits that promote the well-being of its inhabitants. (Chiesura 2004).

For the past 30 years, policies and development patterns encouraged an urban transformation that affected the integrity of the city negatively. These transformations created a social division by benefiting some groups and marginalizing others. Some people were forced to establish communities with extreme poor conditions and unhealthy environment (Dimuro & de Manuel 2011). In other words, these transformations created a panorama of inequality and social and territorial exclusion. Thus, the most socially and environmentally degraded areas of the city are within the communities with less economic resources.

Urban communities in the city of San Juan, Puerto Rico, have been experiencing uneven problems throughout history. The community of Capetillo in Rio Piedras, San Juan is an example of it. The Capetillo community has experienced an urban transformation process that resulted in the devolvement of several environmentally degraded areas. Through a collaborative effort with the University of Puerto Rico and community leaders, an urban space used before as an illegal landfill was transformed into an urban garden and forest. Despite the effort, community members do not broadly use these green spaces. However, public reasoning and the formation of social points of view and values are decisive in environmental issues (Sen in Scholtes 2010).

Our work is an experimental research that focuses on exploring the values and perceptions of some community members, leaders and active users toward the green spaces. We will use socio-ecological qualitative research techniques like direct observation, surveys and interviews in order to understand the community’s dynamics. The aim of this work is to provide recommendations for the administration of these green areas and their project with the intention to developing an environmental education program and a co-management process with the community, the University of Puerto Rico and the Municipality of San Juan.

As co-management is a model whose main feature is the distribution of functions, duties, authority and benefits among different entities, we suggest that this method, by which the State and civil society share responsibility for managing a common area, is the most appropriate for the community to feel empowered to take over this public space by not only using it but also managing it. The relevance of this work is based in the importance of understanding the community’s dynamics in order to advance a procedure to developing a livable city.

References
Displacement of low-income and minority communities is a growing concern for planners in strong markets such as in California, aggravated by rapidly rising home prices and insufficient housing production. Many Metropolitan Planning Organizations (MPOs) are turning to computer models to inform their long-term land use and transportation planning, such as UrbanSim, but these models currently lack the ability to realistically represent the processes of residential displacement.

This paper describes a component of an ongoing project funded by the California Air Resources Board, to improve the capacity of operational models in use by MPOs in California to predict displacement pressures within neighborhoods from investments in transit and policies to concentrate development around these transit investments, as well as to enable simulation of the impacts of housing affordability policies intended to mitigate displacement pressures.

Micro-simulation models forecast land use change based on the economic and behavioral choices of households, employers, and property developers, in response to policy and market contexts. For simplicity, household relocation is typically determined by lifecycle factors such as the stage of life cycle, and income – two factors highly correlated with move rates. For purposes of analyzing displacement pressures, however, these factors exclude rent burdens and other factors that might reflect gentrification and displacement pressures.

In this paper, we first estimate empirical models linking households’ relocation choices to their rent-to-income ratio, controlling for lifecycle and socio-demographic characteristics. We provide results for both the San Francisco Bay Area and a larger national sample. Then, we demonstrate how these results can be incorporated into a regional-scale simulation model by altering the model’s specification of household move predictions. We demonstrate increased sensitivity to rising rents via simulation tests, producing aggregate outcomes where rising housing costs contribute to the displacement of lower-income residents from a neighborhood, as we see in practice.

We find that a household’s rent-to-income ratio is a strong predictor of its choice to relocate, and that the magnitude of this effect varies systematically with income level. Regional land use models can be effectively augmented to capture this process.

Other components of this research effort that will be addressed include refinement of the models of household location choice to better capture realistic budget constraints for renters and owners, which helps to capture another form of displacement, via exclusion. We also are augmenting attributes of existing housing to reflect tenure and housing units covered by affordable housing policies such as rent control.

The final component of this research that will be explored is the refinement of the pro forma-based simulation of housing development, to reflect the influence of housing policies such as inclusionary zoning, density bonuses, and subsidies for affordable housing.

References
JUST TRANSITIONING: THE FINE LINE BETWEEN NEIGHBORHOOD CHANGE AND DISPLACEMENT

Playing out in the media, as well as academia, is a contentious debate over whether gentrification is positive or negative. To the extent that it causes displacement of existing residents, gentrification threatens both equity and sustainability goals (Chapple 2014). But the displacement of retail and commercial businesses is often viewed as a more natural process, or a simple consequence of residential gentrification (Kennedy and Leonard 2001; Freeman 2006). Yet, retail change may displace businesses involuntarily, and also serve as a visible reminder of loss that shapes the local narrative of the neighborhood (Freeman 2006).

Research on business gentrification is scarce. Chapple and Jacobus (2009) analyzed the relationship between demographic changes and business establishment changes, finding that overall retail establishment growth was mostly associated with neighborhoods becoming middle- or upper-income rather than those that became bipolar or gentrified (Chapple and Jacobus 2009). Most recently, Meltzer and Schuetz (2012) analyzed changes among neighborhood businesses in New York City between 1998 and 2007, finding that retail access improved rapidly in low home value neighborhoods that experienced upgrading or gentrification.

This study will investigate the process of business turnover in the context of neighborhood change. I ask, to what extent are business transitions voluntary, who are the winners and losers, and to what extent are outcomes unjust? Using the National Establishment Time Series employed by most previous studies, the study will first determine what “natural” rates of business turnover are in California’s metropolitan areas, based on patterns of succession. Then, comparing gentrifying and non-gentrifying neighborhoods, I will look at business births, deaths, expansions and contractions. A regression analysis will analyze whether, in gentrifying neighborhoods, existing or new businesses benefit most (in terms of sales and employment). Preliminary results suggest that, indeed, it is the new businesses that grow fastest— but only in certain types of markets.

Finally, using a case study of the Mission district in San Francisco, I examine the issues of justice and sustainability. This analysis will be based on the frameworks introduced by Fainstein (2010) and Agyeman (2013), and expanded on by Chapple (2014). Here, preliminary results suggest a process of rapid transformation spurred by both public and private investment. The paper concludes by considering the types of policies, specifically, community benefits, that are appropriate in retail districts undergoing change.

References
- Meltzer, R., & Schuetz, J. (2011). Bodegas or bagel shops? Neighborhood differences in retail and household services. Economic Development Quarterly,
Climate change is a serious global challenge that urgently demands comprehensive mitigation policies that ought to address the contribution of the housing sector to climate change (Fuller & Crawford, 2011). Nevertheless, greenhouse gas (GHG) emissions assessment in the housing sector is particularly challenging because in addition to construction and daily use of housing units, urban planning factors such as density, location of jobs, and transit services also influence energy use and GHG emissions (Norman, Maclean, Asce, & Kennedy, 2006). Therefore, for mitigation strategies in the housing sector to be effective, they must be based on a comprehensive understanding of the complex nature and extent of GHG emissions associated with housing development and use (Ramesh, Prakash, & Shukla, 2010).

Mexico City is one of the largest metropolitan areas in the world, and thus it could enable a better understanding of climate change policies in the global south. The Mexican federal government has implemented housing-related strategies for mitigating GHG emissions by promoting, subsidizing, and financing the purchase of energy efficient technologies such as electricity-saving bulbs and solar water heaters (SEMARNAT, 2012). However, these mitigation strategies do not address GHG emissions stemming from the rapid growth of housing developments on the urban periphery. In the last two decades, federal government-financed dwelling units have been developed on a massive scale in the urban fringe of Mexico City, unaccompanied by public transportation services and nearby jobs (United Nations, 2011). This has led to increasing automobile use and attendant increase in GHG emissions, as residents in these distant housing developments are required to commute to central locations that offer services and employment opportunities. In order to assess the impact of location and transportation on GHG emissions in the housing sector in Mexico City, a pioneering Life Cycle Assessment (LCA) was conducted to compare energy use related to both construction and use of dwelling units. The LCA revealed that the use of gasoline for private transport is the principal contributor to GHG emissions, followed by the use of electricity and gas, respectively.

These results call into question the Mexican federal government’s focus on energy efficient technologies to mitigate GHG emissions instead of encouraging urban planning and land use policies that support government financing of dwelling units in the central city. One possible avenue for GHG emissions mitigation in the housing sector that integrates planning tools and technological innovations is densification of central areas with resource-efficient dwelling units. Beyond the case of Mexico City, this investigation suggests that LCA represents a powerful methodological approach to develop comprehensive GHG emission baselines for the housing sector, which in turn can serve to encourage effective urban planning policies for mitigating GHG emissions in the housing sector.

References
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In the post World War II and the Korean War period, Seoul has experienced rapid urbanization, as seen in many other cities of Asian countries in the same world political position. At the incipient phase of modern economic development without sufficient transportation means, Seoul has become a highly centralized capital. Formal property development has concentrated on flat lands, and mountainous areas were a home of informal residential settlements due to the hardship in construction with limited technologies. After the decades-long but unsuccessful effort to clear the areas, the city government awarded permits to the current residents and legalized their occupancy in order to address housing shortage as well as to provide necessary public infrastructure for the substandard housing within those areas. Since then, the housings on hilly areas became one of the settlements types in Korea, called san-dong-neh or dal-dong-neh (mountain town or moon town, respectively).

As Seoul has developed substantially, concerns on living environment, health and leisure becomes higher, consequently desires to be near nature have increased. While Seoul has not sprawled at the same rate as western cities with equivalent level of wealth, thus suburban housing developments did not provide residents with proximity to nature, I believe natural areas within Seoul has become a target for property development instead. I observe that mountain towns, once built on relatively cheaper land, are now recognized not only for its great potential as land for redevelopment but also for the highly valued land with natural environment. The current property development pattern in the areas differs drastically from the old ones; in the past, one-story small-detached house without private yard is the dominant housing type, while now developers use zoning variance to get higher FAR (Floor Area Ratio) and built high rises in the hope to extract the highest and the best value from the land.

In this research, I define a new housing development pattern in Seoul, Korea and quantify how they are valued differently due to the proximity to the natural environment, the mountain. In the previous studies, land value is determined by a set of attributes including slope and size of lots, proximity to infrastructure, proximity to major arterial roads that make constructions convenient and commuting easy. The value of nature has offset some of the factors on property development that had been previously believed as limitations. The main methodology is hedonic modeling with pooled cross-sectional data from 2006 to the present (2015). The Main dataset is both of the property transaction value and assessed land value. Housing type, developers, location factors are considered together with the main effect of nature on property values. Also other land valuation model—such as contingent valuation and travel cost methods will be introduced to enrich the discussion.

References

Abstract Index #: 326
PUBLIC HOUSING AUTHORITIES AND THE PROVISION OF AFFORDABLE HOUSING: ASSESSING FLEXIBILITY, CONSTRAINT, AND STANCE IN STATE ENABLING LEGISLATION
Abstract System ID#: 1178
Individual Paper
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Since the 1980s, neoliberalism has led to devolution of affordable housing policy to the local level, an increased dependence on both for- and non-profit housing providers, and an increased role for states (Schwarz, 2007). Local housing providers, both for- and non-profit. Throughout the US, a number of public housing authorities (PHAs) also play role in this local context in the provision of affordable housing, doing so in cooperation with or in parallel to other local actors. At the same time, PHAs abilities may vary state-to-state because of differences in state-level public-housing-enabling legislation that specifies the not only processes for creating housing authorities and but also delineates PHAs’ powers. This paper investigates the impact of small but meaningful differences in the legal enabling environment, which may in turn cause variations in PHA’s provision of affordable housing outside of the HUD assisted stock.

States are a crucial and documented scale for housing innovation and administration, supporting affordable housing development through trust funds and tax credit programs (Basolo & Scally, 2008; Stegman, 1999). State policy can give PHAs the flexibility to enact creative solutions for financing housing development (Kleit & Page, 2008). Innovation or restrictions in state policy and legislation can therefore impact activities at the local level (Reese & Malmer, 1994). Given the importance of the state level, enabling legislation has the potential to produce great variation in the structure of PHAs and the activities that they undertake.

To understand and document the differences in state enabling legislation, we conducted a conventional content analysis. For each of the 48 contiguous states, we collected the housing authority legislation from the state revised code. We initially read the documents, inductively creating codes for common elements of the legislation; this process provided a basic understanding of the structure and components of enabling legislation. We found both small and large differences between states, requiring a finer scale of coding. We thoroughly compared the state enabling documents, specifically coding for all differences and similarities.

Finally, we developed codes to categorize the differences as elements of flexibility, constraint, and stance. Flexibility represents aspects of the legislation that provide powers and multiple approaches to housing provision. Constraints are comprised of explicit limitations on what PHAs can do. These include regulations on income ranges or populations that a PHA can serve. The stance reflects the overall tone of the legislation toward affordable housing and tenants. We summarized the contents of each state’s enabling legislation and used the coding process to categorize states according to the degree of flexibility and constraint in the legislation. We developed a typology of state stances that emerged from the content analysis.

This research contributes to the understanding of state legislative environments, their impact on the local functioning of public housing authorities, and the potential for public housing authorities to be key actors in local housing provision.

References

Abstract Index #: 327
WHAT IS THE CONSTRAINT OF AFFORDABLE HOUSING PROVISION?
Abstract System ID#: 1184
Individual Paper
The Tehran housing market is both the largest and most complicated housing market in Iran. Exceptionally, Iran’s housing market is the one economic arena that is dominated almost solely by the private sector, with 97% of new houses provided by individuals and private companies. The number of new housing projects has reached a historic low, with Tehran currently facing a shortage of 100,000 units per year. In addition, some existing properties remain abundant due to low affordability of low and middle-income households and land and housing prices reaching an all-time high.

A wide variety of private agencies and public institutions that are active in unstable politico-economic environments make understanding the operation of this market difficult. Market failure and followed by unsuccessful government policies, has caused housing issue become a national crisis.

Therefore, this research for the first time concerned with enhancing deep understanding of Tehran housing supply throughout the qualitative methodology, which comprised interviewing 50 key actors including previous housing minister, district mayor, different types of builders and companies and bank manager. In addition three housing projects selected as case studies to find constrains in the housing development process.

Within this uniquely Iranian context, the structuration theory presented by Giddens (1979, 1984) and the structure and agency model devised by Healey (1992) are employed to illustrate the duality of structure and agency and consequently providing a much richer insight into the variety and complexity of housing developments. Subsequently, the following results were found; firstly, findings revealed how the structural factors affect the individual agents’ strategies and behavior and vice versa. Secondly, part of the failure of government policies related to wrong understanding of affordable housing and the attitude to provide it. Thirdly, applying the Structure and Agency model in dramatically different context shows that it is necessary to focuses more on local knowledge in planning studies and planners need to consider the local context as a crucial factor in housing provision.

Abstract Index #: 328
LAND CONTROL TOOLS FOR COMMUNITY SUSTAINABILITY: LAND BANKS OR COMMUNITY LAND TRUST IN HOUSTON, TEXAS
Abstract System ID#: 1185
Individual Paper

Planning in the US is still forging new ways to integrate sustainable development, which is recognized as a comprehensive mantra for development planning (Berke & Manta-Conroy, 2000; Campbell, 1996). The American Planning Association (APA) has only recently assembled a task force to establish a standard for developing comprehensive plans which meet the intent of sustainable development (APA, 2010). Jepson & Haines (2014) provided some work in this area through reviewing zoning ordinances to understand integration of sustainable development goals. Still, a dearth of information exists in the literature on the confluence of sustainable development and land use regulations. This paper contributes to closing this gap in the literature. Specifically, the paper offers a focus on tools for the control of land uses to combat gentrification in Houston, Texas.

The paper employs a qualitative analysis approach. Specifically, the paper provides and analysis of existing land use regulations and redevelopment tools. Some archival data will also be collected in order to provide a longitudinal assessment of sustainability as a priority in Houston.

The paper is composed of four parts. The first part establishes a theoretical basis for addressing gentrification through identifying and discussing areas of sustainability that address gentrification. The second portion of the paper explains the local usage of existing tools to combat gentrification, and presents subsequent outcomes
including social disparities; conflicting policies; and citizen engagement. The third part introduces land banks and community land trusts (CLTs) as possible land use tools to combat gentrification, enhance sustainability, and promote social justice in Houston, Texas. The paper closes with recommendations for greater attention to be given to CLTs as a model that better advances the confluence between land use control and sustainability, and a better quality of life for the city’s lower-income residents.

References

Abstract Index #: 329
APPRECIATING AUTHENTIC SOCIAL PARTNERSHIPS THAT ENABLE WELLNESSAND SOCIAL JUSTICE: UNPACKING SUCCESSES BY LEARNING FROM REAL PLACES
Abstract System ID#: 1188
Individual Paper

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If properly claimed, authenticity is a powerful concept that can be used to progressive ends. There is something almost poetic that immediately resonates with the notion of authenticity. The word authentic provides a shorthand that people immediately “get”, even if the term can be problematic and its exact meaning remains elusive and at times contested and divisive.

In her book The Naked City, Sharon Zukin explores authenticity in a place-base context, taking up where luminaries in the 1960s such as Jane Jacobs and Herbert Gans left off in their exploration of neighbourhood authenticity. These place-based explorations hit home for more and more city dwellers who watch as beloved neighbourhoods become unrecognizable in the face of rapid growth.

Our paper will begin by summarizing Zukin’s place-based appreciation of authenticity and looking at how some of her lessons can be applied to social planning. Social planning is often a more slippery concept to appreciate because its impact is less visual compared with urban design or growth management. In particular, we will extrapolate and test key elements of Zukin’s understanding of the concept against two case studies from projects funded by the British Columbia-based Community Action Initiative.

The first of these case studies involved a project led by the Hollyburn Family Services Society in North Vancouver and involved partnerships with two local First Nations – the Squamish First Nation and the Tsleil Waututh First Nation – to deliver much needed mental health and substance use outreach services to both Aboriginal and non-Aboriginal residents in the community, particularly where there had been experiences of involvement with the criminal justice system. The second case study involved a project led by Long Term Inmates Now in the Community. This included partnerships with groups including the local municipality, the District of Mission, to help expand a highly successful program to enable formerly incarcerated people to become more connected to their community by growing organic produce for sale in local farmers markets. Proceeds went to fund victim services programs.

By exploring the degree of authenticity of connection to place and the partnerships created through the programs, our article will aim to: 1) to expand and deepen the discussion of authenticity and ways it can be
applied to a place-based context; 2) to discern why some authentically framed mental wellness interventions work for certain client groups; and 3) to suggest some preliminary criteria that might be useful in setting up an authenticity-informed approach to community development work in a social planning context.

Our article will draw significantly on Zukin’s work, but we will also round out her analysis with contributions with concepts from both a capabilities approach to place-making (Zitcer, 2014) and actor network theory (Letour, 2007).

References


Abstract Index #: 330
IMPLEMENTING COMPREHENSIVE NEIGHBORHOOD REVITALIZATION PROGRAMS (CNRPs): A CASE STUDY OF FIVE NEIGHBORHOOD INITIATIVE AREAS IN PHOENIX, AZ
Abstract System ID#: 1202
Individual Paper

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Beginning in 1974, the Community Development Block Grant (CDBG) program annually allocates federal grants to entitlement communities, allowing municipalities and communities to design their own strategies to reverse deleterious trends in neighborhoods. The CNRPs with concentrated investment have been designed to better meet the needs of local neighborhoods than very widely dispersed CDBG spending—described as “spreading the peanut butter” (Briggs, 2014). While many research claimed that CNRPs have brought dramatic improvements in targeted areas, especially on housing conditions and property values (Galster, Tatian, & Accordino, 2006; Galster, Walker, Hayes, Boxall, & Johnson, 2004; Pooley, 2014), substantial criticism point to inequality and inefficiency in programs’ revitalizing strategies and implementations (Bostic, 2014; Briggs, 2014). The objective of this research is to examine institutional design of CNRPs and its political, social, and economic consequences through a detailed evaluation of five Neighborhood Initiative Areas (NIAs) – implemented by the City and local neighborhood organizations over the past 20 years.

In particular, we examine structural and functional features of CNRPs and characters of public/private partnership among city officials, neighborhood organizations, citizens, and local businesses. Our research question is: “what are the impact of CNRPs institutional design on investment distribution and program outcome?” Our hypothesis is that spending and benefits of CNRPs are both uneven across social groups within each neighborhood, as well as between neighborhoods. We suspect that local character of planning, demands on volunteer time, variations in neighborhood leadership and coordination shape program outcomes in addition to socio-economic and demographic changes. We also expect that CNRPs have become innovative ways of planning and promoted local decision-making process that increased quantity and quality of participation and civic engagement among local residents.

Our research employs a qualitative method approach based on secondary literature, program reports, neighborhood development plans, and investment inventory. It is also based on observations of collaborative-sponsored meeting and relevant neighborhood activities, and interviews with community leaders, stakeholders,
residents, and city officials in each CNRP. Findings from this analysis will allow us to better understand issues in CNRP designs and operations, and its impacts on distribution of investment and resources. The research will provide important implications for policy makers to demand additional attention, refinement, and participations on the future CNRP plans and revitalization actions.

References


Abstract Index #: 331
IMPACT OF SCHOOL QUALITY ON HOUSE PRICES
Abstract System ID#: 1214
Individual Paper

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Central theme or hypothesis
While several studies have empirically estimated the impact of school quality on house prices; none parses out the house price effect of elementary, middle and high schools. Second, the existing studies primarily show a modest impact of school quality on house prices. For example, Nguyen-Hoang and Yinger’s (2011) review of recent empirical literature reports a 1-4 percent increase in house price for every one standard deviation increase in student test scores. However, I hypothesize that the recent immigrants to the San Francisco Bay Area, especially those with high-paying jobs in the technology sector, put a higher premium on school quality. Further, their higher household incomes allow them to bid aggressively for houses in good school districts. Therefore, in this research, I expect to see a significant impact of school quality on house prices; for households in very good school districts, a monetary impact that is comparable to the cost of the alternative to public schools—private schools. This hypothesis is supported by the empirical literature that shows that higher income households put a higher premium on school quality compared to lower income households (Ries and Somerville, 2010).

Research question
Controlling for other factors, what is the impact of school quality on house prices?

Approach and methodology
A review of empirical literature shows strong support for the use of boundary-discontinuity design method (BDDM) to tease out the effect of school quality on house prices (for example, see Bayer, Ferreira and McMillan, 2007; Fiva and Kirkeboen, 2008). BDDM tease s out the effect of school boundary change on house prices by regressing the prices of homes that are on either side of a school attendance area boundary on the structural and locational attributes of the house and the neighborhood-level attributes. Other econometric approaches include spatial regression models, instrumental variable regression approach, and repeat sales approach. Indeed, Nguyen-Hoang and Yinger’s (2011) call for using a variety of approaches to check the robustness of the results. This study uses several of these approaches.

Relevance of work to planning education, practice, or scholarship
Estimation of the impact of school quality on housing prices informs households’ sorting behavior in a housing market. This sorting has important policy implications. For example, it might result in racially and economically segregated neighborhoods (Bayer, Ferreira and McMillan, 2007). Further, to the extent homes in the good school
districts are higher priced and are likely to appreciate more compared to homes in the not-so-good school districts, it has implications for housing affordability, access to “free” public education, and households’ ability to accumulate wealth through investment in their house. Finally, by bidding for houses, homeowners reveal the value they put on public goods and services that accompany their houses; public schools being one of them. Accurate estimation of this value should help state and local governments and school districts in allocating resources more efficiently, devising ways to fund K-12 education, and advocating for additional resources.

Key data sources
Alameda County, CA assessors’ data; school quality and demographics data from various school districts; US Census

References

Abstract Index #: 332
PLANNING FOR HOUSING IN CALIFORNIA: EXAMINING THE LOCATION OF SUITABLE SITES IN COMMUNITIES
Abstract System ID#: 1218
Individual Paper

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Planning mandates by state governments to localities are intended to accomplish broader social goals. Researchers, however, do not agree on the value of these mandates in practice (Bunnell and Jepson, 2011). In the domain of housing planning, studies on the results of state mandates are relatively scarce; however, there are some important findings. In one study, for example, mandates for local housing plans resulted in resentment with cities doing just enough to meet legal requirements (Hoch, 2007), while another study shows state-mandated housing plans are associated with cities supportive of affordable housing spending more of their own source revenue on housing programs (Basolo, 1999).

California law requires localities to plan for housing needs at all income levels. A land inventory has been part of the housing plan historically, but changes to planning law in 2004 introduced more rigorous expectations for this inventory. California jurisdictions were required to identify land suitable for residential development at the parcel level. Moreover, parcel size must be reported for each site to assist in assessing potential housing affordability.

This research asks a set of questions concerning the location of the sites identified in local housing plans. These questions include: 1) To what extent are these sites clustered within a region (county)? If clustered, what neighborhood characteristics are associated with location of the suitable sites? Are the locations of larger parcels, which tend to be more suitable for affordable housing, located in less desirable neighborhoods than smaller parcels? The research uses data compiled from local government housing plans in one southern California county; plans included in the data set were deemed in compliance by the State of California for the planning period 2006-2014. The site data was combined with secondary data sources including the American Community Survey. Using this unique data set, an analysis will be performed in GIS to assess the extent of clustering of suitable sites. This analysis will be followed by a logistic regression analysis to determine if neighborhood socio-
economic and other characteristics predict location of suitable sites. The last analysis will examine the neighborhood context by parcel size using regression analysis.

The research is relevant to housing and planning scholarship and practice. Evaluation of plans is a vital and growing focus for planning research, but is generally under theorized. Understanding planning and development outcomes of mandates for local housing planning can contribute to theory development and to formulation of effective state regulations for local housing planning.

References


Abstract Index #: 333
SECONDARY SUITES IN CANADA: AN UNDERGROUND REMEDY FOR AFFORDABILITY AND SOCIAL MOBILITY?
Abstract System ID#: 1220
Individual Paper

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Canadian cities are facing the triple challenge of rising housing costs, stagnant household incomes, and an increasingly aging population. One solution that has been suggested to ameliorate these challenges is the expansion of secondary suites (typically called accessory dwelling units in the U.S.). Secondary suites are politically controversial, as homeowners fight to protect the “sanctity” of single-family neighborhoods, fearing the in-flux of more transient populations, rising density, parking and traffic congestion, and declining property values. Responding to homeowner concerns, many city councils have outlawed them. But given the affordability crisis, illegal secondary suites – often basement apartments – are rapidly expanding, creating an informal housing market across Canada. For example, in Calgary (pop. 1.2 million), where the median house price is over $500,000, there are an estimated 80,000 illegal secondary suites. With a dire need for affordable housing, cities like Calgary formally reject secondary suites while informally accepting them, only enforcing flagrant code violations when specifically reported. The informal nature of much of the secondary suite market has complicated our understanding of them. For example, where exactly are they located and do they have a distinct spatial pattern? What form do they take – basement, detached, side-by-side, etc? Who is living in them and are these disproportionately immigrants and/or migrants? Are they actually providing affordable housing? This paper presents evidence from phase one of a multi-year research project -- the first pan-Canadian study of secondary suites -- to begin to shed light on some of these critical questions. The data represents the findings from a survey of planning departments from the fifty Canadian cities with a population (2011 Census) of 100,000 or more. The survey findings suggest that secondary suites form part of a shadow society, demonstrating their intersection with questions of race, gender, migration, and citizenship. These findings are important to help re-shape policy with respect to secondary suites/accessory dwelling units.

References

This past year, running water was shut off to tens of thousands of homes in Detroit, Michigan. UN Special Rapporteurs on human rights visited the iconic American city to hear testimony about the city’s inability to deliver on the basics. In the most water-rich region of the country, mostly poor, African American residents found themselves relying on community-organized deliveries of plastic water bottles to get them through each day, half-liter by half-liter. The UN Rapporteurs found the situation full of “indignity” and “contrary to human rights.”

In fact, for the Detroiters who testified before the UN Rapporteurs, the water shutoffs were only the newest shortcoming of the city to uphold the dignity and human rights of certain segments of the Detroit population. As the governor-appointed Emergency Financial Manager replaced their democratically elected city officials; whilst police brutality prevents residents from calling 911 for help; with food deserts continuing to plague the city -- all in all when the public sector is not satisfying basic promises to taxpayers and electorate, and when the private sector does not offer jobs or basic goods, where does that leave Detroiters?

Specifically, I ask: What narratives do Detroit activists tell and hear in their daily organizational lives to explain why they cannot turn to the government to ensure their basic livelihood and wellbeing? And how do these narratives inform practices that activists and organizations engage in to address their problems?

The community development and public management literatures offer many avenues for the public sector to incorporate and recognize resident voices, yet the disconnect between resident needs and the ability to provide for these needs in Detroit remains vast. These literatures offer theoretical frameworks and practical tools for the public sector to deepen community engagement (Cheadle et al, 2005), empower the public (Feldman & Khademian 2003), and promote meaningful participation and inclusion (Feldman & Khademian 2000). Local knowledge is increasingly seen as critical to effective, just, and resilient policymaking (Innes & Booher 2010). Public managers are expected to create public value (Moore 1995) and to meet the shared interests of the public (Denhardt & Denhardt 2000). Even in light of the undue challenges faced by shrinking cities, scholars have called attention to opportunities to create “more productive, sustainable, and ecologically sound… livable cities” (Hollander, et al 2009). These literatures, however, remain focused on the public sector’s initiative and do not offer theoretical or practical tools for residents who are systematically disempowered, unincorporated, and left without access in the public and private spheres. This study investigates the responses of activists and organizations in such a dire situation. Beyond public value, beyond private efficiency, this study contributes insight into the ways Detroiters articulate and mobilize to contest the disenfranchising designs of their city.

Through analysis of ethnographic fieldnotes, semi-structured interviews, and archival research, this study analyzes narratives and practices of five Detroit activists based at three social justice organizations. I am embedded in activities at these organizations and with these activists, where I observe and record narrative accounts and daily practices in the course of ongoing organizational work activities, including community interactions and high-profile events like the UN Rapporteur visit. Narratives and practices are both regular elements of daily life that reveal underlying social meaning and action. Narrative meaning both produces and explains human action (Polkinghorne 1988), while practices comprise daily actions that constitute social life (Feldman & Orlikowski 2011). By discerning and analyzing narratives and practices of activists within
organizations, this study offers an empirical basis for expanding the community development and public management literatures to address recognition and incorporation of citizen voices when the government and private sector are not leading the way.

References

Abstract Index #: 335
DOES CALIFORNIA AFFORDABLE HOUSING PROCESS WORK?
Abstract System ID#: 1238
Individual Paper

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In this research, we evaluate the effectiveness of the Regional Housing Needs Allocation (RHNA) in addressing affordable housing shortages in the Bay Area during the third housing element cycle, 1999-2006. Specifically, we asked 1) how successfully did the Association of Bay Area Governments (ABAG) concentrate affordable housing in areas in need of improved jobs-housing balances; 2) how effective have cities operating under California affordable housing policy been in placing affordable housing near transit and other urban amenities, and 3) how have cities constrained affordable housing development in areas with low job accessibility? We find that ABAG, the authority tasked with distributing RHNA for the Bay Area, successfully distributed new affordable housing units in jurisdictions with greater jobs-housing imbalances when compared to the distribution of market rate production in the same period. However, if we specifically examine imbalances between low-wage jobs and affordable housing, we find that the construction of affordable tended to concentrate in locales with systematically less need relative to market rate production. Among the Bay Area’s three largest cities, we find that San Francisco and Oakland succeeded in placing affordable housing in neighborhoods with greater need for improved jobs-housing ratios, but San Jose did not. Only San Francisco succeeded in concentrating affordable housing near transit.

Abstract Index #: 336
NEIGHBORHOOD TRAJECTORIES OF LOW-INCOME U.S HOUSEHOLDS: AN APPLICATION OF SEQUENCE ANALYSIS
Abstract System ID#: 1263
Individual Paper

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Neighborhood conditions experienced over time by low-income households is a topic of increasing interest and public policy importance. We employ sequence analysis of six neighborhood indicators to identify common patterns among the 20-year longitudinal residential trajectories of 865 low-income households in the U.S. who formed households during 1988-1992, as represented in the Panel Study of Income Dynamics. We first present descriptive analysis results of residential trajectories of these low-income households in general. Then we aim to
discover using quasi-experimental approach (i.e. propensity matching) whether a spell of residence in subsidized housing produces a different (and inferior) subsequent sequence of neighborhood environments in which low-income households live compared to never having resided in subsidized housing. Our most striking finding from the descriptive sequence analysis is that low-income families that begin as households in disadvantaged neighborhoods rarely exit from them over the ensuing two decades, whereas low-income families that begin in better-off neighborhoods tend to transition into successively more deprived ones over time. This pattern is replicated over most neighborhood indicators analyzed, though it often varies by race and gender. Female-headed, nonwhite households of low income experience the most prolonged exposures to disadvantaged neighborhoods, providing evidence about the potential role of space in perpetuating socioeconomic and racial inequalities. Propensity score matching is currently being conducted and results will be available for the presentation in October.

References


Abstract Index #: 337
RECLAIMING URBAN DESIGN AS PUBLIC ENTERPRISE: THE VANCE AVENUE COLLABORATIVE AND URBAN TRANSFORMATIONS IN MEMPHIS (TN, USA)
Abstract System ID#: 1273
Individual Paper

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In US, for more than two decades, local officials have used HOPE VI funds provided by the U.S. Department of Housing and Urban Development (HUD) to relocate tenants from and demolish aging public housing complex. Using Section 8 Vouchers, local and federal housing officials sought to enable former public housing tenants to improve their quality of life by moving to so-called “neighborhoods of opportunity”. Research by several social scientists (Fraser et alii 2009, Goetz and Chapple 2010, Goetz 2011) have documented by of the serious costs and unintended consequences of this program.

Shortly after his appointment as HUD Secretary, Shaun Donovan, announced the launch of a new program to replace HOPE VI called Choice Neighborhoods. This program sought to transform conditions within public housing neighborhoods in a manner that honored local stakeholders’ wishes while minimizing resident displacement. In 2010, the City of Memphis (TN, USA) requested $250,000 to formulate a redevelopment plan for the Vance Avenue (VA) Neighborhood – its last remaining public housing complex. In doing so, the City invited the Vance Avenue Collaborative (VAC), a coalition representing more than two-dozen community-based organizations and a team of University of Memphis researchers to partner with them in preparing a visionary development plan for the VA neighborhood.

Using a mixed-methods approach carried out within a participatory action research framework, this paper describes how University and community partners tried to reorient the process of urban development through an independent community planning effort. In particular, it shows how the partnership used the process of building
an urban design proposal to generate a broad-based public debate regarding urban regeneration, residential segregation, public housing, and economic development in Memphis.

References


Abstract Index #: 338

**WHOSE URBANISM? FROM GUERILLA URBANISM TO LEAN URBANISM FOR SHRINKING CITIES**

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American policy discourses of shrinking city regeneration are “glocally” framed and focused on finding the city’s unique position in the region and the global economy (Audirac forthcoming). In this “glocal” context heavily dominated by gentrifying forces, a struggle between elite (exchange-value-based) and grass-root (use-value based) urbanisms has ensued. A number of alternative urbanisms, subaltern localisms, and transnational third spaces (Hou 2010) have emerged as forms of resistance to spatial stigma (Wacquant et al 2014), blind dismissal in dominant planning discourses (Diaz 2012) and socio spatial exclusion. Until recently, and in the wake of the great recession, grass-roots urbanisms have gone relatively unnoticed particularly by planning pundits offering declining, deindustrialized cities their own brand of urbanism and expertise for rekindling growth. A common tenet among elite approaches in the U.S. is an outright rejection of distributive policy and/or a search for alternatives to increasing the exchange value of vacant land. Typically they reframe the problems of community development in shrinking cities as fundamentally related to:

- A dearth of entrepreneurial skills (Porter 2011) and of creatives (Florida 2002)
- Stifling land-use zoning (Duany 2013) and lack of compact development (Nelson el al. 2014).

This paper reviews the aforementioned grass-root and elite urbanisms, draws conclusions and implications for established city planning tenets and ultimately for city planning education.

References

Urban renewal has been highly questioned because of its unintended effects on the displacement of residents to housing situations where residents are worse off in terms of their housing adequacy, affordability, access to the labor market, among many other unexplored effects. This paper focuses on characterizing residential mobility in Champaign-Urbana in the context of the current process of urban renewal the Bristol Park neighborhood. In a first stage we explore what are the main variables predicting higher propensities of residency changes, controlling for available covariates. The initial results show that Bristol Park has a lower average probability of residence changes compared to those neighborhoods with traditionally more rotating residents. This suggests that Bristol Park is a more stable neighborhood compared to others, and its residents could face higher costs of moving which might not be considered in current compensation plans.

Euclidian zoning and segregated land use planning practices have been challenged to address certain urban issues resulting in many critiques emerging against various core values of planning practices and planning paradigm. There are numerous urban problems that could not be addressed in single use development. Mixed use development as a new theory claims to have the solutions to the urban issues associated with single use development. However, mixed used developments have been criticized for also failing to address their purported claims.

This research focuses on analyzing and evaluating the tenets of mixed-use development to determine whether claims of accommodating mixed-income residents, increased density, improved racial diversity, provision of affordable housing, and improved employment trends are achieved. In doing so, 632 single use Block Groups and 84 mixed-use development Block Groups that are located in majority of larger metropolitan areas of the US cities examined. The study employed a number of different techniques of spatial and data analysis including GIS, descriptive and other statistical analysis, and regression analysis. The results were mixed. Density changes were not found to be different between single use and mixed use areas and the minority population reduced in the mixed-use block groups. On the other hand, affordability, employment and mixed-income issues were better accommodated in mixed use areas than in single use areas.

The results also showed an increase in rent within mixed-use development that has coupled with an increase in minority population in the single use development which increased by 0.58% over the same period. This could be related to outmigration of minority population from the mixed-use developments. This is contrary to the ideals of mixed-use development since mixed use development are intended to provide a residential facilities for diverse income group and a racially diverse population. Therefore, more attention and accommodation for moderate increase in housing rent is needed.
In 2007 and 2008 disruptions in the residential mortgage markets reached an apex and sent shock waves across the US economy as well as global markets. Former Federal Reserve Chairman Ben Bernanke in an address to the London School of Economics is quoted as said, “The proximate cause of the (economic) crisis was the turn of the housing cycle in the United States and the associated rise in delinquencies on subprime mortgages” (Kling 2009). This assessment is supported by numerous research studies designed to examine the causes of the downturn in the economy and the cause of the foreclosure crisis itself.. (Foote, Gerardi, Goette, Willen 2009)

This study will adopt an end user centric approach to justice by making justice or access to justice for the residential mortgage borrowers the unit of analysis. The Department of Justice in their Access to Justice Initiative defines access to justice (ATJ) in conceptual working terms as being able to efficiently deliver outcomes that are fair and accessible to all irrespective of wealth and status. This definition was adapted by the Foreclosure Mediation Workshop (2011), and is appropriate for use in this study. By selecting justice or access to justice for borrowers as the unit of analysis the measurement methodology will focus on the impact of the reform in the Residential Mortgage Finance System (RMFS) on borrowers.

The RMFS is backed implicitly or explicitly by government guarantees. As such homeownership is supported by all taxpayers and is considered a social good. This dictates that there should be a level of fairness, without elements of discrimination, in the (RMFS) for those who have the resources and choose to participate. Government has the responsibility and the legislative ability to provide oversight and stop abuses in order to protect consumers.

This presentation is extracted for a broader work by the author that analysis of the quality of the legislation, policies and programs that have been developed as remedies to address the irregularities in the RMFS for residential borrowers. However, this presentation will only examine the quality of the enabling legislation through the use of a conventional content analysis and policy mapping (Sifer, Sulek, & Mayer 2011). There are three question addressed in this presentation:

1. Are the remedies just (fair and effective)?
2. Are the remedies corrective?
3. Are the remedies reformative?

“The Dodd Frank Act” is the primary corrective legislation. The Content analysis provides an interpretation of the content of the text of the enabling legislation. This insight into the initial legislation should reveal if there is an
underlying justice criteria embedded in the legislative intent. The justice criteria and indicators are adapted for principles in justice theory and related studies (Gramatikov, Barendrecht, Laxminarayan & etl 2009).

The content analysis will focus on the text from two sections of the Dodd Frank Act. They are the Qualified Mortgage and the proposed Standard Mortgage Servicer Agreement since these sections have the most direct impact on borrowers. Given the complex nature of the legislation and the required interaction between sectors, a policy map will provide a visual representation that can be used as a tool to capture critical elements of the legislation at it relates to borrowers. This can be used to inform practice especially in the planning community.

References

Abstract Index #: 342
OPPORTUNITY, TRANSPORTATION AND NEIGHBORHOOD CHOICE: A QUANTITATIVE EXAMINATION OF LOCATION CHOICES IN MTO
Abstract System ID#: 1357
Individual Paper

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In this paper we apply a discrete choice model to study location preferences of participants in the Baltimore portion of the Moving to Opportunity (MTO) federal housing program. In the 1990s and 2000s, the MTO program provided housing vouchers to families living in federally assisted public housing. Although a great deal of research has examined how neighborhood characteristics impacted outcomes of MTO participants, comparatively little research has examined how families selected their neighborhoods.

We exploit precise location information across several datasets from the state of Maryland to develop a rich set of location alternatives. MTO households are spatially identified with a particular housing unit and neighborhood composition. Using a discrete choice model, we describe how these characteristics impacted the location decisions of program participants.

We describe how neighborhood and household choices differ by treatment group as well as by automobile access.

References
- Pendall, Rolf. "Driving to opportunity: Understanding the links among transportation access, residential outcomes, and economic opportunity for housing voucher recipients." (2014).
SURVIVORS OR VICTIMS: A VIEW OF RESILIENCE FROM THE SLUM DWELLERS PERSPECTIVE.

Abstract System ID#: 49
Individual Paper

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Theorizing informal settlements as resilient urban systems has prompted this research. Based on an ethnographic research in the Pedda Jalaripeta (PJ) Slum of Visakhapatnam, India, we propose that resilience in the context of urban slums is multi-dimensional. The PJ slum is resilient in that it has maintained its cultural identity as a fishing village over a 40-year period (temporal); it continues to provide affordable, quality housing to its residents (spatial); and the community maintains direct linkages to those with power and access to legal knowledge (political).

The goal of this research is to expand on the conceptual understanding of resilience in slums. An ethnographic approach was used to study the PJ slum in Visakhapatnam. From March through June 2014, 44 residents of the community were interviewed and 3 focus groups were organized one each with older fishermen; younger fishermen; and the women in the community. The perspectives of local leaders were canvassed through multiple key informant interviews. Employees in various government agencies such as the fisheries development office, the planning, engineering, and welfare departments were also interviewed.

Like most urban slums, the PJ slum witnessed a myriad of natural disasters over the past four decades, a fire destroyed two-thirds of the slum in 1984 and the community was rebuilt after the disaster. In 2004 the Indian Ocean tsunami wreaked havoc on the slum, the community has recovered since then. More recently, the community has witnessed an avalanche of tourism-oriented development within the Coastal Protection Zone that threatens the coastal eco system and the community’s livelihood (fishing). The PJ community not only survived these natural and man-made hazards but it has moved to a better economic, physical, and social standing over the past four decades.

Our findings indicate that a longitudinal temporal view of the PJ slum provides a comprehensive understanding of resilience and offers an accurate assessment of structures and dynamics that affect the community. Spatially, the PJ community tapped into multiple resources to expand both formally (through government programs and loans) and informally (without proper documentation). Politically, the community has developed direct links with politicians, NGOs and government agencies, these linkages have provided the community with resources to cope and adapt to disasters. These direct linkages or connections with those of power also provide the community with legal basis, justifications, resources and opportunities to transform in to an enhanced social and physical state.

The multi-dimensional resilience of the PJ community (Temporal, Spatial and Political) presented here challenges the view of slum dwellers as passive disaster victims and focuses on their ingenuity and adaptability to overcome external circumstances. Recent empirical evidence has shown that these communities can cope and adapt to disasters and that they possess high reserves of social and political capital (Andavarapu & Arefi, 2015; Jabeen, Johnson, & Allen, 2010; Keck & Etzold, 2013). Here we present resilience as a lens to identify the capacity of residents to organize and confront their own vulnerability. This conception of resilience will allow for policies aimed at improving the quality of life of the residents without dismantling the entire urban eco system (slums).

References

THE RETURN OF REGIONAL PLANNING IN BRAZIL

Abstract Index #: 344

With the recent passage of the Estatuto da Metropole (Metropolis Statute) in January 2015, Brazilian State governments are once again able to address urban planning issues at the regional scale. This follows in the trend of increasing urban planning powers through national government enabling legislation that began with the passage of the Estatuto da Cidade (City Statute) in 2001. While many of Brazil’s pressing urban problems may be better addressed through region-wide thinking, inconsistencies between these two statutes and previous efforts at regional planning in two Brazilian cities point to some of the difficulties in future regional planning efforts.

Building upon research previously conducted on regional planning theory and efforts in Brazil, this paper examines the processes and outcomes of regional planning efforts in the Brazilian metro regions of São Paulo and Belo Horizonte. Research on this topic is important in that (1) power and capacity structures have shifted between state and local governments in Brazil in recent years, with a greater concentration of planning abilities at the local level; and this new regional planning statute reverses this trend. In doing so, (2) the layering of planning instruments between different governments raises many issues of capacity and cooperation that have not been fully explored in the Brazilian context.

Authors, such as Katz (2000), have noted a resurgence in regional planning in North American and European contexts and point out that “devolution in governance” changes the ways in which planning issues are addressed. Likewise, Wheeler (2002) has observed the growth in interest in the “New Regionalism” and suggests that it will occur “not through top-down regional government, but through incremental development...between existing levels of government” (267). In Brazil, metropolitan regional governance was mandated during the military dictatorship (1964-1985) and housed at the state level. Souza (2005), however, argues that its demise occurred as a result of its negative associations with the authoritarianism and centralization of military rule. As a result of this and other economic and political restructurings at the end of the dictatorship, Brazilian urban planning was left highly fragmented until the creation of the City Statute (Melo, 1995). As Caldeira and Holston (2014) point out in the case of São Paulo planning, the recent institutionalization of innovative reforms around participation and social justice in that Statute has not been enough to ensure their fulfillment at the local level due to complicated party politics. Therefore, this research asks: How can previous attempts at regional planning in Brazil inform future efforts under the new legislation?

This paper expands and complicates the previous research on regional planning conducted in different urban contexts. In Brazil, this new statute ostensibly represents state retrenchment through the reconcentration of power in state governments and is therefore markedly different from the “New Regionalism” discussed by Wheeler. Moreover, as the case in São Paulo demonstrates, recent state government attempts have failed due to a lack of understanding of local level planning and regulations. And in Belo Horizonte, one of the most effective articulators of regional planning initiatives has been a coalition of real estate developers. Therefore, Melo’s distinction between clientistic and “old” power structures becomes blurred in this new governance context. For planners, care must be taken to ensure the great strides in participatory democracy and planning that have occurred in Brazil—and placed it as an international example of such efforts—are effectively incorporated in these new regional planning bodies. Additionally, planners should take note of the requirement
that municipal plans be drafted in accordance with the regional plans, as this opens up the opportunity for new forms of political maneuvering and dissent between various political parties.

References


Abstract Index #: 345
RESIDENTIAL PROPERTY TAX AND EQUITY IN CIUDAD JUAREZ, MEXICO: ARE THERE REGRESSIVE EFFECTS?

Individual Paper

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Local municipalities in Mexico either lack the technical capacity or willingness to improve their revenue collection capacity; this is due to the fact that it is easier to wait for revenue transfers from the federal government rather than risk a political backlash. In recent years the federal government in Mexico is attempting to pass legislation to be able to undertake the mandate of collecting property tax revenue, which normally belongs to local municipalities. In general terms the policy has the goal of collecting revenue. However, it overlooks equity aspects. Thus, the paper’s objective is to analyze equity in the property tax structure. The hypothesis being tested is the existence of a regressive property tax structure. The hypothesis is tested using the case of Ciudad Juarez, Mexico, a city located along the U.S.-Mexico border across the Rio Grande from El Paso, Texas.

There are two concepts related to equity—horizontal and vertical equity. In regards to property tax, horizontal equity refers to the concept that those properties of the same value should be taxed at the same tax rate. Vertical equity refers to the fact that properties of higher value should pay a higher tax rate; considering a progressive tax structure as equitable. For the purpose of this paper the focus will be on vertical equity.

In order to operationalize the hypothesis, I employ data from the cadastral office (assessed value) and market value data collected through different sources such as the home sales section in the local newspaper, web sites of real estate companies and banks. Then, the data is subject to analysis testing for vertical equity employing different regression model techniques as described in Paglin and Fogarty (1972), Cheng (1974), Sirmans et al (1995), Kochin and Parks (1982). The different authors focus on the intercept and the slope parameters to test the hypothesis of a regressive property tax structure. All those models use assessed value and market value. My contribution to the topic is that in the paper I also developed a model that estimates the amount of tax based on the formula employed by the municipality and regresses it on the assessed value square to determine if the tax rate increases at an increasing rate—thus lacking a regressive effect.

The results in the different models strongly support the hypothesis that indeed the current tax structure in the city presents evidence of a regressive nature. From a policy perspective this finding is important because this contributes to the inequities that exist in Mexican society. A progressive property tax structure is a necessary condition to achieve a more equitable city in Mexico.

References

TRANSADUCTION ASSESSMENTS IN DEVELOPING COUNTRIES: IMPACT EVALUATION OF SOCIO-ECONOMIC IMPACTS OF THE MILLENNIUM CHALLENGE CORPORATION (MCC) ROAD IMPROVEMENTS IN THE REPUBLIC OF GEORGIA USING A QUASI-EXPERIMENTAL DESIGN

Abstract Index #: 346

Abstract System ID#: 86

Individual Paper

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Given the economic importance of road network improvements for economic development in developing countries in the face of rapid urbanization in the 21st Century, it is not surprising that often the majority of foreign aid provided is for road related projects: for example, the African Development Bank invests almost 80% of its portfolio in infrastructure. At the same time, maintaining public support for development aid given continued uncertainty about the effects of development projects and a climate of increasing development budget cuts has resulted in a global emphasis on results-based evaluation systems (Hansen et al 2011). Results-based evaluation approaches offer the potential for governments and planners to quantitatively measure the impacts of infrastructure or other planning improvements on a range of socio-economic indicators, including household welfare, health and education outcomes, and such methods are increasingly being used for transportation and even municipal planning (Khalifa 2012) in developing countries. Consequently, focus on results-based evaluation systems for road infrastructure to provide tangible evidence that the designed infrastructure has met and is meeting the objectives originally set for it, such as poverty reduction, is unprecedented. Rigorous results-based evaluations of programs including infrastructure improvements offer the potential to identify which types of interventions work, which projects have succeeded in their goals, and lessons learned which in turn can inform improved government and donor spending (Smith et al 2013). This is particularly true for informing decisions on road improvements as they are traditionally (and in most cases today) made using cost-benefit measures usually focusing on Vehicle Operating Cost (VOC) savings (Van de Walle 2009).

Yet despite this consensus, there is little reliable empirical evidence on both the types and magnitudes of the socio-economic benefits of road improvements (Smith et al 2013). Experimental or quasi-experimental evaluation approaches have been identified as crucial for road projects because of their rigor and their robust ability to address issues such as the endogeneity of road placements, their ability to better identify and match comparison or control groups in treatment/control approaches, and their ability to control for fixed time-invariant factors or common trends affecting both treatment and control groups (Hansen et al 2011; Smith et al 2013; Nkonya et al 2014).

In this paper, we conduct an evaluation of the socio-economic impacts of The Millennium Challenge Corporation (MCC) US$ 200 million improvement of 220 km of highway in the Republic of Georgia, completed 2008-2010, using a rigorous quasi-experimental design that includes an approach that estimates quantified variation in project improvement benefits across geography and space. The improved highway provides significant trunk connectivity in Georgia, as it connects the capitol, Tbilisi, to both Turkey and Armenia to the south, and travels through one of the poorest and least accessible regions of Georgia. Three distinct evaluation methods are implemented to allow for a robust comparison of estimated outcomes: (a) a difference-in-difference approach, (b) a matched difference-in-difference using propensity scores, and (c) a “dose-response” continuous treatment
approach that estimated project impacts across geography, quantifying the variation in impact for individual communities at individual locations. The evaluation is able to quantify impacts on a range of socio-economic outcomes for poor rural households, including household welfare, employment, health, education, and accessibility to social services (hospitals and schools) and urban markets.

The research contributes to the understanding and development of results-based evaluations for transportation and planning projects in the developing world.

References


Abstract Index #: 347

ORGANIZATIONS AND PARTICIPATORY DEVELOPMENT: POST-DISASTER RECOVERY IN HAITI

Abstract System ID#: 99

Individual Paper

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Participatory approaches increasingly are being emphasized in post-disaster recovery projects in developing countries. Many organizations engaged in this work promote the use of a participatory approach as if it were a single solution, even though the ways in which they engage local communities often varies significantly. Research focused on the variation in participatory approaches, especially for post-disaster recovery development efforts, is scarce in the literature and, thus, we know little about the impacts of different approaches on post-disaster recovery.

Studies of organizations show that variations in key characteristics can result in differences in programmatic approaches, including levels of inclusion/participation. However, there is a scarcity of systematic research on the work of organizations engaging in post-disaster recovery projects. Therefore, the central aim of this paper is to better understand the use of participatory approaches by organizations in the international post-disaster setting.

Haiti, near the capital city of Port-au-Prince, was rocked by a magnitude 7.0 earthquake on January 12, 2010, bringing death, destruction and chaos to an already poor and vulnerable community. A large influx of organizations responded to this disaster shortly after the earthquake. Many of these organizations, as well as more recent groups, continue to work on recovery projects in Haiti. For this reason, the country presents an excellent case for assessing the work of a large number of post-disaster recovery initiatives working in the same context.

This study uses a multi phased, mixed method approach, involving a unique database of aid organizations compiled by the researcher. A multivariate analysis of organizations will be used to identify associations between organizational characteristics and participatory approaches. The results of this research will enrich our knowledge of participatory approaches used by organizations in developing countries and expand our understanding of the recovery process in an effort to improve work undertaken in the international post-disaster setting.
Urban areas are now home to 50% of the world’s population and are projected to hold 70% by 2050 (UN, 2014). By 2030, the United Nations (2014) projects that the proportion of people living in urban areas will be over 60% of the total global population, totaling 4.9 billion people. Roughly 95% of this massive urban growth will occur in less developed countries (Brockerhoff, 2000) where rural areas are either a greater percentage of the population or where rapid economic growth is leading to the development and growth of cities.

This research addressed the spatio-temporal coupling of urban growth in one urbanizing region of the Middle East – Doha, Qatar. Using data from satellite imagery, we analyzed physical changes in the Doha metropolitan region over time in order to provide a description of urban patterns that are specific to that study region. We asked three research questions: 1) Does rapid urban development in the Middle East lead to increasing urban sprawl; 2) In what way does rapid urban growth lead to unique patterns of development; and 3) To what extent does urban sprawl interact with other forms of development to impact the density of urban development? Answering these questions will provide some of the only descriptions of the physical growth patterns of Doha, one of the most quickly developing cities in the Middle East. Additionally, we aim to contribute to the urban planning literature by understanding the extent to which physical and spatial urban growth interacts with temporal scales of development.

Land cover changes are researched for elucidating urban sprawl in Asian cities that have been experiencing rapid development and urbanization (Cho, 2005; Li & Peijun, 2013; and Radhakrishinn et al., 2014). Urbanization process takes on a mixed aspect of infill development and leapfrog urban sprawl. In addition, the urbanization process causes excessive long-term urban expansion. The land cover change analysis provided a means of spatially articulating six categories of urban growth. While the core areas of the West Bay in Doha, the central business district (CBD), and the hinterlands remain unchanged over the study period, all of the other areas could be placed into one of five development patterns.

Our approach to the study of Doha relied on satellite sensor imagery and a series of geo-statistical analyses. We acquired 30-meter resolution satellite sensor imagery from the US Geological Survey’s Landsat TM, ETM+ and OLI files from the years 1987, 1991, 1998, 2003, 2009, and 2013. We selected these images based on the following criteria: 1) cloud cover of less than 5%, 2) summer season (from May to August, except 2003), and 3) the availability of increments of four to seven years. The study area (31.2km x 37.8km), which encompassed the Doha metropolitan region, was extracted from each scene of the satellite sensor imagery.

The results of our analysis revealed three key findings. First, the physical infrastructure of the Doha metropolitan region has rapidly increased at a compound annual growth rate of 6.75% over the 26 years of our study period (270 km²). Second, when comparing build-up urban areas to population growth during the same time period (i.e., total urban area divided by total population), each individual in Doha began to have less overall space after 1998. The amount of land per person actually increased from 36m² in 1987 to 47m² in 1991, but this was followed by a
downturn every year until 2013. Each individual in Doha now has 13m2 of land, and this is directly attributable to
the amount of urban development. Finally, while the physical growth of Doha is discernable through an analysis
of satellite images, the quality of growth and its implications for the social, economic, and environmental
conditions of the region all require further study.

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Abstract Index #: 349

POST-APARTHEID HOUSING DEVELOPMENTS AND SENSE OF COMMUNITY IN JOHANNESBURG

Abstract System ID#: 161
Poster

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The right to housing is enshrined in the South African constitution, and despite the delivery millions of subsidized
houses, several challenges remain in order to more fully integrate low-income residents into the mainstream of
urban life. Although subsidized housing delivery in South Africa between 1994 and 2003 surpassed efforts in any
other countries, a significant housing shortage persists. Many new arrivals to housing developments in South
Africa come from squatter settlements, where they have developed social capital and networks of trust, support,
participation, and livelihoods. A great concern with slum clearance and relocation projects is that new low-
income housing developments disrupt the pre-existing sense of community, which is crucial for quality of life in
the slums. The large scale housing delivery and the housing backlog, coupled with the lack of attention to social
impacts of approaches to housing allocation, have far-reaching policy implications for the long-term viability of a
low-income housing market and residents’ well-being (Charlton, 2009).

The City of Johannesburg supports a vision for a “world class” image in an effort to move towards a more
equitable and inclusive society that provides a decent quality of life for all citizens, but the means to reach this
vision have often been through actions reminiscent of oppressive apartheid era planning (Huchzermeyer, 2011).
Housing advocates within the African National Congress (ANC) identified homeownership through the
Reconstruction and Development Programme (RDP) as a strategy to create access to decent housing for the poor
and black residents who were denied such rights under apartheid. The RDP and future policies have largely been
biased towards homeownership and asset creation for the poor (Charlton, 2009). Although the majority of RDP
houses are constructed in remote locations, where land is cheaper, housing environments that serve more of a
“dormitory” function, as opposed to a community, further estrange the urban poor from access to market
opportunities (Charlton, 2009; Lemanski, 2008).

I examine the sense of community among low-income residents in two post-apartheid housing sites in
Johannesburg – Cosmo City and Diepsloot – which have a large resident population residing in RDP housing.
Sense of community refers to an individual’s feeling of belonging to a group with a shared connection and
attachment to place. In particular, I pose the following question: How do low-income residents characterize the
sense of community in their current housing development? This question is important because it examines the
interdependence of housing and residents’ sense of community – an understudied issue in urban planning
literature.
In order to answer this question, I take a mixed-method approach by analyzing household surveys, qualitative interviews with residents and relevant stakeholder groups, and participatory mapping exercises. Although the work is ongoing, I have conducted 120 household surveys, 36 resident interviews, and 6 participatory mapping exercises in Cosmo City and Diepsloot. These data collection activities are based upon McMillan and Chavis’ (1986) four indicators for sense of community: social trust, community participation, neighborliness, and emotional connection.

This research gives local residents the opportunity to voice their point of view. The preliminary findings indicate that residents have limited community engagement and low levels of social trust within their townships. This project’s emphasis on residents’ own voices may provide the impetus for developers and community organizations to enact community building initiatives that more closely reflect residents’ needs and wants.

References

Abstract Index #: 350
HIGH-RISE HAPPINESS: HOUSING PREFERENCE AND LIFE SATISFACTION IN KOREA
Abstract System ID#: 165
Individual Paper

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Though initially associated with modernity and modern living, high-rise housing has come to be associated with poverty, crime, and unhealthy living conditions in the West. Meanwhile, in the rapidly developing economies of East and Southeast Asia, where rapid urbanization drove cities to adopt high-rise housing as a practical solution to overcrowding, there are indications, however, that in Asian cities, high-rise apartments have come to be preferred to their low-rise counterparts. For instance, Yuen et al. (2006) have found that Singaporean residents “have voiced high levels of satisfaction and their continued intention to remain in high-rise blocks”. This paper offers evidence that this is also the case in Korea. This paper uses a fixed-effects ordered logit estimator (Baetschmann et al. 2011) in a subjective well being model to identify the effect of housing type, size, and tenure on life satisfaction, controlling for a wide variety of personal circumstances and characteristics. Data is drawn from the Korean Labor and Income Panel Study, which offers detailed, nationally representative longitudinal data on roughly 5,000 urban households for the period 1998–2008. The analysis indicates that Koreans express significantly higher levels of life satisfaction when they live in larger housing units, when they own rather than rent their units, and when they live in apartments as opposed to other forms of housing, including independent houses. Though these findings may not be surprising for those familiar with the Korean housing market, the analysis provides rigorous evidence that high-rise living is the preferred form of housing in Korea. Though these findings do not explain whether this preference is due to the status or amenities associated with high-rise living, or some combination of the two, they do lend support to emerging research that firmly locates the drivers of housing preference in socio-cultural context rather than characteristics inherent in the built environment (Park and Ferrari, forthcoming).

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ASSESSING SOCIO-ECONOMIC IMPACTS OF RURAL ROAD IMPROVEMENTS IN GHANA: A CASE STUDY OF THE TRANSPORT SECTOR PROGRAM (II).

Road transportation is the predominant mode of transport in African countries and a critical element for economic development (Porter, Blaufuss & Owusu-Acheampong, 2011; Thompson, 2011; Donnges, Edmonds & Johhanessen 2007). The high reliance on road transport has led to major road investment in Sub-Saharan Africa (Braithwaite, 2003). With a goal of revitalizing rural economies and reducing poverty, the Ghana Transport Sector Program prioritized improvement and maintenance of rural feeder road systems (Republic of Ghana Ministry of Roads and Transport, 1997). This study employs a case study approach to assess the socio-economic impacts of rural road improvements in three northern regions of Ghana. The study measured ex ante/ex post changes in household income and expenditures, crop production, the usage of motorized vehicles, access to markets, school and health facilities and transport charges. The analysis revealed that road improvements led to increased use of motorized transport, with growth in household income and personal expenditures along each subject road corridor. However, increased transport charges also signified soaring fuel prices (Cantore, Antimiani & Anciaes, 2012) and the difficulties in maintaining road networks, potentially impacting access to markets, school and health facilities. These findings suggest that Ghana should better coordinate road maintenance and utilize its natural gas reserves with a program developing natural gas fuels and alternative fuel vehicles. The use of alternative fuel vehicles in concert with rural road improvements could improve access and make transport less vulnerable to petroleum market fluctuations.

References

Research Question:
This research explores the link between resilience and collaborative governance in terms of the ability of regions to retain key industries in the face of global and environmental shocks and stressors. Industrial resilience requires productive adaptations that help maintain a local industry's place in the evolving structure of the regional economy. Previous research suggests such resilience emerges in part from cooperatively structured industry governance linked to more open knowledge and collaborative networks, but this research is largely restricted to manufacturing industries in developed countries. Within the context of more land-intensive agricultural industries in developing countries, this research explores the extent to which institutional arrangements determine issues of trust and reciprocity, as well as network closure and openness, and the impact this has on the resilience of regional coffee industries in Mexico and Costa Rica. Coffee is an ideal industry in which to study local industry resilience, because it is both geographically sensitive and global in terms of production, and especially sensitive to environmental and economic shocks. Furthermore, the industry has recently emerged from a period of international market restructuring, deemed the "coffee crisis."

Hypotheses:
This research hypothesizes first that coffee production clusters with stronger local networks and more open external networks are more resilient, and second, that higher levels of collaborative governance, measured through the importance of cooperatives in local coffee economies, lead to better outcomes for the industry as a whole. The rationale for these hypotheses is as follows: (1) Firms benefit from social capital when trust reduces transaction costs and creates knowledge exchange, (2) a local industry’s openness and capacity to connect to outside networks is important for efficient and resilient relationships higher-up commodity chains, and (3) cooperatives promote trust and reciprocity within members of a community (or potentially an economic cluster), which allows for social networks of collaboration to form that enable productive relationships furthering prosocial behaviors.

Methods:
To test these predictions, we compare how institutional configurations within regional coffee clusters -- the ways in which coffee growers organize themselves to process and market their product as well as manage local threats to coffee growing -- impact network openness and strength, as well as trust, using Social Network Analysis (SNA). With SNA we measure the horizontal and vertical relationships of the industry’s key local actors and local coffee mills (n=100) in eight different regions. We relate this information to data regarding ability to sustain production levels and qualitative evidence of adaptation and innovation during a critical ten year time period (2001-2012) that saw wholesale changes in the coffee industry. This analysis compares social capital among actors in local coffee industries (small private mills, transnational mills, and cooperative) as well as among coffee clusters (resilient clusters, declining clusters, highly cooperative clusters, and low cooperative clusters). Of note, this research is further informed by extensive survey and case study analysis of these clusters.

Importance:
Planners are tasked with helping to create strategies and institutions that foster the evolution of regional industries in a way that supports the well-being of local populations. In the case of agriculture, this strikes at the heart of place identity, and represents not only socio-economic, but also socio-ecological relationships with the land. Understanding what forms of institutional and social organization best support resilient adaptive behavior among actors in local agricultural industry networks can directly inform planning approaches to support regional development in agricultural communities in the global south.

References


**Abstract Index #: 353**

**NEGOTIATING GOVERNANCE: THE CASE OF CHINA SPECIAL ECONOMIC ZONE PLANNING**

**Abstract System ID#: 384**

**Individual Paper**

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This paper studies how decentralization and spatially delimited zones have been used to govern China's economic transformation and in what way these experiences challenge traditional debates on states and decentralization.

For over three decades, decentralization has been the most significant government restructuring activity worldwide, claiming to achieve development and democracy through dissolving power to local levels. However, none of these works have questioned the central assumption underlying these discussions: the fixity of a structure with unchanged boundaries of authority. The chief goal of decentralization is expected to be a fixed structure, e.g. federalism. Not much attention has been paid to the bargaining process that keeps the authority boundaries fluid. Despite much excellent work on this subject, scholars have not yet fully explored how decentralization has been redefined in the developing countries in such ways that have not always led to social justice regardless of the influence of the international development discourse.

This study will remedy this gap by examining the intergovernmental bargaining that targeted the planning of three development zones in two urban regions in China (i.e. Binhai New Area in Tianjin, Guangzhou Development Zone, and Nansha New Area in Guangzhou). This study focuses on what has made the assumingly fixed structure fluid: the implicit and explicit bargaining between the center and the subnational governments. Through a close and fine-grained case comparison of the planning process of development zones in three regions, I will show how inter-governmental negotiation—explicitly through open communication and interactions and implicitly through non-compliance, rule violation, or other tacit strategies—works as a key mechanism to engender development strategies that bring about different paths of development. The research explores two questions: How does inter-governmental negotiation function as a mechanism of governance? And how do paths of development differentiated by the forms of collaborative relationships?

In this study, these zones are analyzed as platforms for inter-governmental contestations, instead of being examined with the conventional approach of seeing zones as examples of successful policy implementation. The theoretical framework that developed from this study can open a new window to examine the multi-scalar multi-level competitive and collaborative intergovernmental interactions. This paper contributes to convert the ‘China story’ into richer Chinese stories, and also provides examples of instruments and governance structures in Chinese planning today. It also provides wider theoretical and practical relevance to spatially delimited economic zones in other countries and posts questions that challenge theoretical understanding of the role of planning in international development.

**References**

Meaningful change often involves the transformation of policies, rules, systems, programs and people through collaborative planning processes that engage stakeholders over an extended period. While there has been a growing literature on collaborative planning, there is little that focuses on the specific role of planners in facilitating collaborative planning processes and even less on sustaining public engagement over extended periods of time often required to enact change. We take the idea of transformative planning, building upon the general definition that emphasizes “participatory planning that empowers the community to act in its own interests” (Kennedy 2009), and integrate ideas from the social learning tradition of planning that emphasizes mutual learning towards collective understanding and action. This paper presents a conceptual framework for transformative planning from which the authors outline ten considerations for sustaining public engagement towards transformational ends.

These considerations are based on a summary review of the literature on transformative planning and public engagement along with a process of reflective praxis involving two different types of planning initiatives for which the coauthors served as planning facilitators from 2007-2014. One planning process was a grassroots-based effort to establish a youth and family service center in a rural community. The second was a multi-sector systems change effort among a diverse range of stakeholders to reform juvenile justice practices. Both took place in Hawaii and each of the planning processes spanned a period of over 2 years.

Sustained engagement requires the cultivation of commitment to work towards a goal that is continually evolving as well as dedication to overcome the inevitable challenges and obstacles that bottom-up change initiatives often confront. Public engagement in bottom-up planning processes is often difficult to sustain due to the fact that there is often no authority at the top that is incentivizing participation. Yet bottom-up process can generate a great deal of innovation as community advocates and public and private sector staff on the front-lines get together to collaboratively tackle problems they share. Ten considerations for sustaining public engagement in planning address the following: creating common ground, enjoying short term successes, gaining representation under norms of inclusivity, growing place-based leadership, nurturing a culture of collaboration, building organizational and individual capacity, fostering personal enrichment and empowerment, creating spaces for synergistic creativity, routinizing social learning, and stewarding adaptive problem-solving. Examples from the two planning processes are used to illustrate the lessons that have implications for planning theory and practice.

References

WHAT DETERMINES THE SETTLEMENT INTENTION OF RURAL MIGRANTS IN CHINA? ECONOMIC INCENTIVES VERSUS SOCIOCULTURAL ATTACHMENT
Abstract System ID#: 392
Individual Paper

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Large-scale rural-urban migration in China has sparked a considerable interest in the settlement patterns of migrants from both scholars and policy makers. In the international migration literature, two competing theories have dominated the debate over determinants of migrant settlement intention and outcomes, though scholars have yet to reach a consensus over which factors are more important. An earlier theory, derived from the neoclassical economics, emphasizes the economic incentives in host and origin countries and depicts the settlement decision as a process to maximize the value of migrants’ human capital. The other theory, rooted in sociology, stresses the sociocultural conditions and asserts that social attachment and integration are of crucial importance to migrants’ settlement decisions. The bulk of literature in China’s rural-to-urban migrants has put their emphasis on formal institutions such as the hukou system, or argue the “settlement vs. return” decision is part of a family strategy of migrants to maximize economic opportunities while mitigating the hukou-based constraints.

This paper seeks to identify the factors that influence the settlement intention of rural migrants in urban China. More specifically, we investigate 1) what factors – economic incentives or sociocultural conditions – determines the settlement intention of rural migrants in urban China? 2) Does the determinants differ between different age cohorts, i.e. between the so-called 1st and 2nd generation migrants? Based on the data derived from a twelve-city migrant survey conducted in 2009, statistical analysis revealed that 1) social ties, attachment, and integration are, in general, more influential than economic incentive factors (e.g. human capital and economic opportunities) in deciding settlement intention of rural migrants in China, and 2) relative to 1st generation, the 2nd generation migrants’ settlement decision is more influenced by economic incentive factors.

We believe that this research not only contributes to the scholarly understanding of rural-to-urban migration in China, but also sheds lights to current policy making that promote urban integration of migrant populations in urban societies in wave of people-oriented urbanization in China.

References

MEETING BASIC NEEDS: HOW SOCIAL ENTERPRISES BLUR BOUNDARIES BETWEEN THE PUBLIC, PRIVATE AND THIRD SECTOR FOR SOCIAL AND ECONOMIC IMPACT IN COLOMBIA, MEXICO, KENYA, AND SOUTH AFRICA

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MEETING BASIC NEEDS: HOW SOCIAL ENTERPRISES BLUR BOUNDARIES BETWEEN THE PUBLIC, PRIVATE AND THIRD SECTOR FOR SOCIAL AND ECONOMIC IMPACT IN COLOMBIA, MEXICO, KENYA, AND SOUTH AFRICA

Abstract System ID#: 443
Individual Paper

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Policy makers around the world, attempting to capitalize on innovative and market oriented business models, are increasingly promoting the role of social enterprises in the provision of basic goods and services. In 2014, the G8 countries launched a Social Impact Investment Taskforce aiming to foster social investment markets across G8 nations and the US National Advisory Board on impact investing stressed the need for a more intentional and proactive partnership between government and the private sector if impact investing is to reach massive scale. Further policy directives to promote social innovations have been enacted at the national level in emerging markets, for example in Colombia a center for Social Innovation was founded in 2011 as a part of the Agency for the Alleviation of Extreme Poverty (ANPSE). Within this context, social enterprise has emerged in an effort to emphasize profit and/or market orientation with a social mission through innovative and efficient approaches to services and goods that address poverty and poverty related needs (Seelos, 2009). Yet, little is understood about the role and impact of social enterprise in the delivery of basic goods and services as well their relationship between the government, the private, and third sector, particularly in developing and emerging markets.

In an effort to better understand the landscape of social enterprises in emerging markets, 1,124 organizations in Colombia, Mexico, Kenya, and South Africa were surveyed in 2013/14 (response 289). This study differs from most other research approaches on social enterprises by not applying a set definition, but rather organizations were included in the sample if they had been successful in acquiring social investment and hence had been identified as appropriate target recipients for social investors. Through an analysis of the survey, this paper sheds light on planning and the new labor division in the international development landscape among the private, public and third sectors for social and economic impact in emerging markets, as well as the growing legitimacy of market oriented, for-profit organizations as partners for service delivery. The paper explores how social enterprises partner, collaborate, and compete with the public, private and third sectors and how they can contribute to social and economic impact, as well as the tensions created through the dual goal of social and financial return. Lastly the paper explores the importance of developing national and international criteria for social enterprises in order to develop policies that contribute to clear organizational structures and accountability mechanisms that help preserve the social mission and erode the ambiguousness of the term.

References
Justice and The City: (re)Examining the Past to Create the Future
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paper explores these questions through a study of the planning process of an ambitious government-led urban redevelopment policy in Turkey. Despite the comprehensive national scale of this urban renewal program enacted under complex legislation, it formally neglects consideration of residential displacement. My objective is to explain why such a bold national urban “transformation” policy is carried out without deliberate planning for displacement. I use case study methodology and adopt a multiple-embedded case study design. My cases are three metropolitan cities; Adana, Bursa and Izmir. I build my research on a variety of data sources including (1) semi-structured interviews with the local government officials, representatives of professional organizations, elected neighborhood representatives and neighborhood associations; (2) documentation and (3) participant observation. Preliminary findings suggest that local governments perceive residential displacement as an intrinsic component of urban redevelopment and do not recognize displacement as a downside of development. Instead, local governments often consider the prospects of displacement as a tool to integrate the marginalized communities with the rest of the city. Displacement is predominantly viewed as a threat by the low-income groups, living at subsistence level. These groups tend to organize to resist displacement prospects only if they closely know about another process of residential displacement that took place in their cities. The larger question I address in this research is how development can take place without displacement. To study this, my goal is to explain how redevelopment creates displacement and how it ignores the challenges of resettlement, even when it is ostensibly well-intentioned. The case of Turkey provides an example of a national scale redevelopment implemented in different cities. This allows me to conduct a variety of comparative cases all under the umbrella of the larger national policy. The similarities and differences among cases highlight the opportunities as well as bottlenecks for urban development that does not displace masses.

References


Abstract Index #: 358

EXPERIMENTATION AND “SLOW LEARNING”: TRANSNATIONAL MIGRATION AND COMMUNITY DEVELOPMENT IN THE DOMINICAN REPUBLIC

Pre-organized Session: The Politics of Making and Re-making: Transnationalism, Circulation and the Emergent in Urban and Community Development

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Although the origins of American city planning can be traced back to the plight of immigrants in the expanding industrial cities of the early 20th century, their voices and interests have been mostly absent from the field’s literatures today. A more recent strand of work has begun to fill this gap by employing and advocating for the use of a transnational perspective to make sense of the complex social dynamics that emerge in places where migration is a way of life. Some of the more eloquent projects in this vein explain how migrants and those left behind help weave complex webs of interaction that link home and destination communities and the resulting opportunities and challenges that emerge across borders (Sarmiento & Beard 2013, Sandoval 2013).

According to Roy (2011) the transnational turn within the planning discipline opens new opportunities to rethink the discipline’s claims of being a global enterprise, where world-spanning trends turn into fashionable models and normative templates of the trade.
In doing so, it opens the possibility to rethink some of the conceptual categories that planners often use when designing their interventions, and to come up with novel examples of how to address challenges and opportunities brought about by increased migrant flows.

This paper employs a transnational optic to examine how three Dominican hometown associations (HTAs)—which can be defined as voluntary organizations whose members share a common place of origin and generate support to carry out projects in home and migrant communities—engage in transnational community development through a series of projects pursued in their hometowns, located in the southern region of the Dominican Republic. It focuses specifically on the routines that HTAs employ to achieve their goals and how these organizations have a tendency to seek answers to complex development issues through experimentation. This is due, in great part, to the absence of a specific set of national programs or formal policy structures that encourage and prioritize specific HTA investments or steer community organizations towards specific development solutions—like Mexico’s 3-for-1 matching funds program.

As the ethnographic data collected throughout a 5-year period in Boston, New York, and the Dominican Republic shows, being able to experiment and troubleshoot allows the organizations to sidestep the strictures of “fast policy” (Peck and Tickle 2002) and programmatic “monocropping” (Evans 2004), which in turn, provides them opportunities to engage in “slow learning” (Roy 2011). That is, in the absence of formal structures, learning becomes a continuously evolving exercise. Nevertheless, learning opportunities come in many guises, so development trials can lead to important process innovations, but also costly mistakes. In light of this, the ability to identify and make the most out of unforeseen development consequences stemming from experimental projects becomes a fundamental community planning skill for HTAs.

References


Abstract Index #: 359
PLANNING FOR DISASTER RESILIENCE IN RURAL INDIA: CHALLENGES FOR SURVIVORS OF THE 2013 FLASH FLOODS IN THE HIMALAYAS

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Despite a growing body of literature on how sustainable land use planning, shelter and housing policies help reduce or eliminate long-term threats of natural disasters in urban areas, there is limited understanding of how these impact rural communities in developing countries. This article aims to bridge this gap by investigating the effects of the 2013 flash floods on rural households in the Himalayan State of Uttarakhand in North India. It highlights the protective actions taken by survivors immediately following the flash flood. It also discusses the challenges faced by government and nongovernmental agencies in providing temporary and permanent shelters to those who lost their lands and homes to the flash flood and landslides.

This article analyzes data collected from 316 survivors of the 2013 flash floods from 17 villages in North India. It investigates how demographic characteristics, type of warnings received, risk perception, disaster experience,
damage to home and property and location of the village (plain, midland or mountain) influenced the decisions to evacuate and search for temporary shelters and select locations for post disaster permanent housing. Preliminary results indicate that most respondents received their first information about the flood from social sources such as friends, family and other villagers (45.9%) and saw it coming themselves (42.1%). Most respondents reported their homes were either moderately damaged (14.6%), severely damaged (25.0%), or completely destroyed (48.4%). Findings clearly demonstrate that although 98% villagers had never experienced a flash flood in their lifetime, their social perceptions and traditional knowledge of their environment motivated them to evacuate and take actions that ultimately saved the lives of their families and themselves. However their search for temporary shelters and permanent housing is fraught with challenges related to finding safe public land for relocation and rebuilding, livelihood recovery and efforts to meet sustainable land use planning goals.

The article concludes by emphasizing the need to plan for rural resilience as a goal for these recovering communities in the Himalayas. It calls for approaching post-disaster shelter planning not simply as a basic material human need, but an integral part of social identity, mental well-being, and the reconstitution of economic livelihood. There is agreement that the most influential fields affecting the resilience of the built environment are design, planning, engineering and construction. Thus it is important that the central, state and local government including the public works department, engineers and planners and nongovernmental agencies involve citizens in planning for rural resiliency. It is important to use citizens’ indigenous knowledge and social and community ties in setting up a robust disaster warning system and creating a regional shelter plan. Doing this will ensure that climate related and sustainability initiatives are part of a comprehensive rural planning strategy and not just a missed opportunity.

References

Abstract Index #: 360
PILOT PROJECTS AND HIGH PROFILE INTERVENTIONS: IMMEDIACY, VISIBILITY AND THE MAKING OF TRANSPORTATION REFORM IN MEXICO CITY
Abstract System ID#: 545
Pre-organized Session: The Politics of Making and Re-making: Transnationalism, Circulation and the Emergent in Urban and Community Development

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Since 2006 Mexico City has been the site of large investments in sustainable transportation, including an expanding bus rapid transit network and growing bicycle share and smart parking management systems. At the same time, the city has seen an increase of private investment in urban highways and automobile infrastructure. This renewed attention to transportation has been framed in terms of a turn toward “urban mobility” policy, in which the meaning of transportation infrastructure has been re-defined. This re-signification of the purpose of infrastructure has served as an organizing discourse around which a variety of actors and technologies have been mobilized in efforts to enable local urban reforms. As a result, state and non-state actors today speak of transportation infrastructure and services as tools that can create a more sustainable, inclusive and democratic city.
This paper traces the assemblage of urban mobility as an emergent policy space in Mexico City by analyzing the politics behind an ongoing transportation reform. I argue that technologies such as bus rapid transit, bikeshare infrastructure and smart parking systems have facilitated new spaces for political engagement through which city officials, international NGOs, experts and citizens redefine the meaning of sustainability, democracy and the right to the city. While the actors making this emergent policy space all mobilize global best-practices, my analysis shows how policies are implemented through political compromises among actors with different understandings of the substance of policy, but who agree on the need to achieve short-term success. Under this logic, transportation policy in Mexico City has focused on “pilot” projects and high profile interventions deployed in areas of the city that bring high visibility and where political conflict can be avoided. I call this the “politics of immediacy and visibility” and argue that this is an essential strategy used by policy actors to bring credibility and legitimacy to reformist agendas with the hope that they can take hold over time and across space, in other words, be replicated and be sustained. However, decisions on infrastructure have long term effects in the material and political dimensions of the city, and this analysis shows tensions between the immediacy and visibility of current projects and the prospects of achieving the desired goals of reform.

This work also sheds light on two important moments in the process of policy-making: the process by which policies and best practices take new meanings as they are implemented; and the process by which the sites of intervention are chosen in efforts to smooth out policy. I argue that paying attention to these moments allows us to better understand the political dynamics behind urban sustainability reforms and the logics that legitimize distribution of infrastructure and “sustainability fixes” (While, Jonas, and Gibbs 2004). Ultimately, this paper contributes to debates on policy mobilities (Peck and Theodore 2010; McCann, Ward, and Cochrane 2011), the politics of infrastructure (Monstadt 2009) and planning in metropolises of the global south (Miraftab 2009; Roy 2011). This analysis draws on extensive qualitative and ethnographic work including participant observation of meetings in-depth interviews with planners, policy makers and civil society actors, and in archival research of media coverage.

References

Abstract Index #: 361
CRIME IN INFORMAL AND FORMAL PUBLIC TRANSIT SYSTEMS: A COMPARISON OF USER PERCEPTIONS IN EL ALTO, BOLIVIA AND BOGOTÁ AND SOACHA, COLOMBIA

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In developing cities, where income inequality is often compounded by severe spatial segregation, affordable transportation is vital to marginalized populations’ ability to access social and economic resources. Innovations such as Bus Rapid Transit (BRT) are therefore a vital tool for sustainable, equitable development (Hidalgo and Gutierrez, 2013). While BRT has resulted in major improvements to sustainability and travel times, transit crime – both robbery and sexual assault – remains an intractable problem. Some of the most prominent BRT systems in
the world have also been identified as some of the most dangerous (Thomson Reuters Foundation, 2014). This undermines the systems’ ability to help low-income residents, particularly women, access opportunities.

This project examines the causes and consequences of crime in informal and formal transit by comparing the two Latin American transit systems: (1) the informal transit of El Alto, Bolivia and (2) the TransMilenio BRT system, which serves Bogotá, Colombia as well as the neighboring municipality of Soacha. Through quantitative transit user survey data, qualitative interviews with users and professionals, and direct observation of the transit systems, I identify the characteristics of these two very different transit systems that facilitate crime. I then document how the actual incidence and perceived risk of crime cause residents to change their travel behavior or constrain their mobility. Finally, I discuss the differences between robbery and sexual assault in terms of their affects on transit users and awareness of the problem among policymakers.

I find that crime in the two systems arises from two opposite sources. The small vehicles that dominate El Alto’s informal system create risk by isolating passengers from potential sources of aid. Meanwhile, intense crowding in TransMilenio forces passengers into extremely close proximity with others, making it difficult to safeguard oneself and one’s possessions. Regardless of source, the risk of crime negatively affects transit users’ travel behavior and their subjective, emotional experiences of travel, eroding quality of life.

By documenting the broad extent of transit crime’s negative effects, even among those who have not been directly victimized, this study demonstrates the urgency of creating transit systems that are both sustainable and safe. By identifying sources of crime, it provides a means of evaluating suggested solutions such as defensible space and women-only transit cars. Additionally, while bringing the voices of the victims of crime, particularly women, into transit planning has been recognized as a vital tool for improving safety (Wekerle, 2005). This type of public involvement is often seen as difficult in developing countries, particularly since most theories of public involvement in planning are based on developed countries (Vasconcellos, 2001; Fainstein, 2010). This project demonstrates a method of accomplishing this task, even in the absence of pre-existing, robust mechanisms for public participation.

References


Abstract Index #: 362

INTRAURBAN SUB CENTERS IN TWO COUNTRIES WITH DIFFERENT LEVELS OF DEVELOPMENT. COMPARATIVE RESEARCH BETWEEN SAN DIEGO, U.S.A, AND TIJUANA, MEXICO

Abstract System ID#: 613

Individual Paper

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The object of this paper is to show that the market economy generates different intraurban land use structures in a city from a first world country and another from a developing country. Specifically, it will test whether the organization of tertiary subcenters (trade and services) in San Diego, California, U.S.A., is different from that of Tijuana, Baja California, Mexico in the following aspects: spatial distribution of the hierarchy of subcenters (urban
form), and the weight of both the increasing returns to scale/productivity (supply side) and the population's income, segregation by income and density (demand side) on the generation of subcenters. This research draws on the literature that critiques the monocentric and polycentric standard models of intraurban land uses and supports the point of view that modern cities have diverse type of economic spatial distribution ranging from dispersal to subcenter's hierarchy a la W. Christaller. To test the differences between both cities mentioned above, I first define the concept of tertiary subcenter and construct an indicator of the degree of centrality (\(GC_j\)) by neighborhood: the number of central functions. Second, the urban form of each city is defined with indicators of the spatial distribution of the social groups and the hierarchy of centers (relative localization). Third, demand and supply behavior are defined separately with regression models for each city, where the dependent variable is \(GC_j\) and the independent ones are indicative of business' production scale & productivity and of the population's income and density. Fourth, I will compare statistically, on the one hand, the two functions of urban form, and on the other hand, the two regression equations. This comparison will tell us whether Tijuana and San Diego are different in both the urban form and the generating mechanism of the hierarchy of subcenters. In this research, the assumption about institutional influence on intraurban land uses is that urban plans generally follow the spatial allocation of resources driven by market mechanisms in both countries. The data used is for the 1990s and comes from population and economic censuses of Mexico and the United States; the geographical unit of analysis is the census tract. This research has two conclusions relevant for urban planning. First, in the explanation of subcenters formation the tertiary and the manufacture activities should be analyzed in a separate way because they have different localization factors. Second, cities like Tijuana and San Diego -neighbors but belonging to countries of asymmetrical development- have different both urban form structuring and planning priorities.

References

Abstract Index #: 363
REVISITING KOREAN SAEMAUL MOVEMENT: PRESIDENT PARK’S EXPERIMENTS IN 1970S AND FORTY-YEAR VILLAGERS’ ADAPTATION
Abstract System ID#: 633
Individual Paper

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The Korean Saemaul Movement (New Village Movement, New Rural Community Movement, or KSM) in the 1970s was a political initiative to modernize rural economy and to change traditional and unscientific mentality of peasants, under the powerful top-down leadership of President Park, Chung-hee. Unlike highly controversial debates on Park’s 18-year tenure as President (1961-1979), historical reviews of KSM are generally quite positive. It has been regarded as one of the most positively influential governmental policies contributing to the national development of the Republic of Korea. It has also been a popular modernization model for the Third World.

Nevertheless, KSM’s conversion of Korean traditional villages into new modern villages has not been fully investigated in terms of built environments. Interestingly, President Park was the most influential and
experimental actor for the KSM’s conversion towards new built environments. He was basically not a person to preach vague agenda and to be reported the progress. Rather, he deeply engaged national core projects such as Gyeongbu (Seoul-Pusan) Expressway, Saemaul Movement, Heavy and Chemical Industrial Complex, and so on. He personally drew sketches, calculated necessary resources, composed a song of Saemaul Movement, and designed a model farmhouse and villages for Saemaul Movement. Under the context, this paper aims at unearthing President Park’s experiments towards new built environments in 1970s, and tracing forty-year villagers’ adaptation and transformation for the experiments.

Since almost all capacity in 1970s Korea was mobilized in order to succeed in KSM, it fundamentally had a complex and multi-faceted aspects ranging from national-scale plans to village-scale projects. Among them, this paper especially focuses on two village-scale projects in the beginning of KSM which President Park initiated and directly implemented: First Samaul House in Yong-in and First Saemaul Village in Cheon-an. The House was designed as a weekend farmhouse by President Park in 1972. The Village was selected as one of the ten pilot Saemaul villages in 1972, and newly built as a concentrated settlement composed of three housing types near Gyeongbu Expressway. Both the houses and the villages still keep their original forms considerably because the original keepers and most of the residents have lived there.

This paper’s field research was performed for two months in 2014 in Korea. The relevant literature, ArcGIS files, and village-scale statistical data were collected. The open-ended interviews with keepers, residents, and relevant scholars were also conducted according to the interview protocols which had been qualified by the University of Washington Human Subjects Division. In addition, the visited houses and villages were directly measured, and documented into architectural drawings. The pictures showing historical changes of houses and villages over time were also gathered from the residents.

This paper placed Park’s experiments of built environments in the historical context of Korean traditional houses and villages in order to identify and assess them. Then, the paper interpreted 40-year villagers’ adaptation and transformation for Park’s experiments in two different scales: house-scale dealing with housing type, room arrangement, extension, and so on, and village-scale covering village layout, road, common facilities, and etc. Finally, the paper reached following conclusions: First, President Park’s experiments pursued westernized and industrialized built environments which were totally different from Korean traditional houses and villages. Second, in terms of house-scale adaptation and transformation, villagers tried to extend their houses horizontally, especially in the storage, kitchen, and restroom. In addition, they have continuously upgraded their resource managements in the water, fuel, sewer, and so on. Third, in terms of village-scale adaptation and transformation, villagers pointed out the concentrated village layout’s advantages, and limitations due to insufficient infrastructures including narrow farm streets, distant schools, and etc.

References

Abstract Index #: 364
APPLICATION OF LAND READJUSTMENT IN POST-DISASTER RECONSTRUCTION PLANNING: A CASE OF BHUJ (INDIA)
Abstract System ID#: 641
The objective of this paper is to present a detailed analysis of the application of the use of land readjustment mechanism specifically in post-disaster reconstruction situation. While a disaster such as an earthquake or a tsunami causes large scale devastation and destruction, these events have sometimes been used by planners for large scale reconstitution of land holdings through application of planning tools such as land readjustment (or land pooling). Land readjustment is a process of reconstitution of land holdings or lots into rational and regular shaped lots, adding public infrastructure such as public roads and parks, the land for which is contributed equitably by all landowners, as a percentage of their land holdings. Several examples are available from around the world where local governments and policy makers have used such an approach while rebuilding lost housing and infrastructure.

While land readjustment is commonly used for urban development and particularly for converting irregular shaped agricultural lands to lots suitable for urban developments with street access and infrastructure, there are few instances where it has been creatively applied in a post disaster reconstruction process. The paper will examine some of these cases where land readjustment has been carried out specifically in the context of post disaster reconstruction planning. For instance, the Hyogo Prefecture and the City of Kobe applied land readjustment projects in conjunction with urban redevelopment and restoration to ensure that reconstructed areas were built more resilient with wide streets, public open spaces for evacuation, and consolidated old and dense housing (Preuss 2000). Chile also has limited experience with the same in Santiago (Hong and Brain 2012).

A successful example comes from the historic city of Bhuj, India where more than 50% of buildings in the city were destroyed in an earthquake measuring 6.9 on the Richter scale that claimed approximately 18,000 lives in Gujarat, India. One of the reasons for this heavy loss of life was because that many low-quality building fells onto the narrow streets in the walled city, and the rubble blocked egress and prevented emergency vehicles to come in. The state government embarked on a large scale reconstruction planning process which used land readjustment as a key tool for inner city areas. More than a decade after implementation, it is considered a successful and shining example of reconstruction planning.

The people of Bhuj did not want to accept the government’s relocation policy and were not willing to move away from their 500-year-old city to a safer, less-congested area, the government decided to reconstruct the inner city. The comprehensive plan included several elements such as land use zoning, road network and infrastructure planning, and inclusion of seismic safety regulations. A grid of interconnected streets was laid out using the land cleared from collapsed buildings to ensure emergency access to the inner congested city. The land needed to create this wider road network was assembled by the use of land readjustment mechanism, known as town planning schemes (TP schemes). A proportionate amount of land was deducted from each land owner to create wider public roads and increase access, and the remainder was readjusted and redistributed to the original owners. Particularly notable is that all of this was done using the existing provisions in the state’s town planning legislation. My paper will examine the case study of Bhuj in detail in the context of its successes and challenges, and provide critical insights on this land readjustment implementation in a post disaster situation. Despite Bhuj’s success, such reconstruction tools depend greatly on the existing legal and political systems and may be difficult to replicate in post-disaster reconstruction in other vulnerable urban areas around the world.

References

After China’s re-estabilishment of urban planning in the late 1970s, Chinese planners faced unprecedented challenges. The nation’s social and economic liberalization introduced new urban dynamics, even as China’s institutions of politics and governance persisted. In response, Chinese planners and their international collaborators have often turned to planning theories based in the practices of European and American planning. By adapting these practices to the nation’s social, political, and cultural institutions, the Chinese planning community has developed new, hybridized planning approaches. For instance, development control planning is modeled on Euro-American zoning practices but adapted to Chinese governance structures. At the same time, persistent critiques of “planning failure” suggest that these imports may not always fully explain Chinese planning practice. These gaps are often interpreted as failures of practice, but they may also point to the need for new interpretive lenses that better reflect the realities of China’s cultural and institutional context.

As Chinese urbanization enters a period of slower, “new normal” growth, Chinese planning is confronted with another period of re-invention. This shift offers an opportunity to revisit the interpretive assumptions of the past three decades and propose new directions for the development of planning theory and practice. Given China’s size and its role in global urbanization processes, critical reflections on Chinese planning also have implications for how we understand planning practices elsewhere in the world. This roundtable seeks to foster such a conversation by posing the following questions:

1. What Chinese planning practices have been effectively explained by existing interpretive lenses, and what practices are still not well understood?
2. What interpretive tools (from social theory, planning theory, cultural analysis, etc.) might help us better understand such practices?
3. What implications do these new insights have for our understanding of planning practices elsewhere in the world?

Proposed areas of inquiry include issues such as community, markets, and participation.

References
Today’s estimated 11 million global refugee population raises important challenges for planning cities and regions, particularly in the Global South where the vast majority of these refugees are located. While reconstruction and re-adaptation have become common themes in a planning discipline increasingly concerned about “urban resilience” (Vale 2005), less attention has been given to protracted situations where millions of refugees and internally displaced persons struggle to secure shelter and livelihoods in conditions usually depicted as “temporary”, yet often extending indefinitely. The fact that most of these refugees settle in urban contexts (e.g. Somali refugees in Nairobi, Khmer Krom, Rohingya, and Vietnamese refugees in Bangkok, or Syrian, Iraqi and Palestinian refugees in Lebanon) where they sometimes form a sizable percentage of the local population (e.g. more than 1 out of 4 people in Beirut today is a refugee) requires the planning discipline to converse with other disciplines, particularly refugee studies, and to extend and adapt some of its methods to inform contemporary policy responses to the ongoing urban refugee crisis.

In this paper, I argue that the research methods developed to study processes of housing production and acquisition in low-income settlements (Jones and Ward 1994, Fawaz 2009), particularly those methods investigating the workings of informal market mechanisms (e.g. circulation of information, housing products, forms of agreement, prices, retaliation strategies) can be extended to investigate refugee shelter strategies and their impacts on urban contexts. This approach can provide valuable insights for articulating shelter policies that respond better to the needs of refugees while mitigating productively the negative side-effects of large refugee influxes to urban settings.

To demonstrate my argument, I apply these methods to a case study in Beirut (Lebanon) where around 350,000 Syrian refugees have found shelter since 2012. I specifically document the transformation in one low-income neighborhood where 300 housing units were surveyed to inquire about housing occupation and where 60 households (50 refugees, 10 Lebanese), three realtors and two public agents were interviewed. My findings indicate, first, a highly responsive (and lucrative) informal housing market, which through the addition of floors and the subdivision of existing units has increased its available housing stock several-fold over a period of months. It further indicates that many parallels exist between processes of housing acquisition for low-income Lebanese dwellers and Syrian refugees, particularly in the heavy reliance on social networks for accessing information, securing contracts, and resisting evictions in cases of conflict. Not surprisingly, however, field findings indicate that the very large influx of Syrian refugees has considerably reduced the quality of available housing and precipitated a process of slum-lording where Lebanese families sublet their apartments through a handful of local realtors while they leave to other venues. Findings further highlight the vulnerability of refugees vis-à-vis these realtors and their decreasing negotiation/retaliation abilities as the neighborhood slides towards becoming a de-facto camp where over 75% of dwellers are refugees (Fawaz et al, 2014). These findings suggest policy responses towards integrated, neighborhood-upgrading type of interventions, that combine both physical upgrading and institution building of the type advocated elsewhere for informal settlements (Fawaz 2009). These findings are important for informing shelter response in large refugee crises. More generally, and in relation to the contemporary planning theory, these findings widen current reflections on urban resilience to show informality as a key asset when cities need to adapt rapidly to new realities. They also nonetheless highlight the types of vulnerabilities that may arise from relying on informal housing channels and draw our attention to the need to mitigate them.

References


Implementing Participatory Planning in Niterói, Brazil

This paper will explore the importance of an institutionalized structure for public participation in Brazilian cities within a context of entrenched inequality and spatial segregation (Maricato, 2009). During the 1990s, several Brazilian cities experimented with progressive local planning derived from the urban reform movement and Brazil became a laboratory for new approaches of local governance and participatory democracy (Fernandes, 2011). The Statute of the City, approved in 2001 through broad participation of Brazil’s urban reform movements, officially recognized the right to the city and aimed to promote social justice by alleviating the array of complex problems faced by Brazilian cities. Overall, the Statute recognized the social function of property – the regulation of urban development as a public issue rather than as an individual or state interest – as a guiding principle. The Statute mandates institutionalized participation in planning processes including citizen councils, large-scale forums and public hearings.

In this paper, I explore the potential emancipatory role of participatory planning in the urban sphere in Niterói, Rio de Janeiro State. By emancipatory, I mean the Statute’s requirement that cities are required to do master planning with broad-scale participation at all levels, which should (in theory) bring about widespread change and social justice. In Brazil, one rationale for implementing participatory planning is to transform the exclusionary urban order by incorporating a broad range of actors.

I explore two questions in this paper to understand the practice of the Statute’s participatory tools. First, to what extent are the participatory requirements in Brazil’s Statute allowing citizens to become involved in planning processes? Second, what are the implications resulting from these new channels for citizen participation? I use the concept of ‘participatory institutions’ to understand the participatory reforms implemented in Niterói (Avritzer, 2009). This idea combines two schools of thought – citizen participation and the role of strong institutions – both of which are applicable in Brazil where an institutional framework for participation has taken a leading role. The paper deals with the experience of participation in Niterói, with Healey’s (2003: 110) proviso that “process matters.” Despite problems with the practice of participation in Niterói, “participation takes place within specially designed institutions... an outcome of institutions designed to promote participation” (Avritzer, 2009: 4). This paper is based on field work in the city Niterói in 2010-2011. The methodology is based on semi-structured interviews, document analysis and observation at participatory meetings.

While a nuanced approach is necessary to understand the achievements in the area of participation, I show that a gap exists between the rhetoric of the Statute and local practice. Middling practices of participation are often the result, as I show in the case of the institutions of participation in Niterói. Yet despite the problems, the practice of participation in the planning system is remarkable in Niterói, given the challenging context of Brazil as well as the changes that have occurred in Brazilian urban policy and planning following the dictatorship. Overall, I argue that not only is this embrace of participation innovative, but the fact that it is buttressed by an institutional system is both meaningful and one from which other locales could learn. While there are challenges in the practice of such participatory fora, without an institutional process for the participation of society in planning decisions, even sincere commitments to participation may never amount to a process allowing for such decisions to be included. Thus, strong institutions are critical in guaranteeing the right to the city in the sense of participation in a planning system for all.
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If there is extensive literature on mechanisms for prediction and prevention of disasters in the urban context, why do governments continue to struggle with losses in the same communities, disaster after disaster? Evidence (Satterthwaite, 2011) shows that key to the issue is a lack of understanding of the processes by which human settlements are established and the factors that encourage the population to remain in high-risk areas. This paper delves into the complexities of urban poor populations, housing projects, and natural disasters. Governments and urban planners have not yet found a definite solution to the issue of safe, adequate, and affordable housing for the urban poor; if any, new urban legislation has unintentionally aggravated the situation of these populations (Sanderson, 2000).

More specifically, this paper discusses the implications of relocating urban poor families to “safe housing” projects; which is even today, one of the most common yet controversial government “solutions” in the developing world. Planning efforts to implement relocation without adequate consideration of the underlying factors that create and sustain human settlements often leads to failure at implementation - the resistance of the population to relocate or the abandonment of the new housing. The priority of the urban poor is daily survival, therefore project beneficiaries frequently return to pre-relocation sites in search for economic opportunities (Paine, 2002; Satterthwaite, 2011). Furthermore, if not planned consciously, relocation disrupts social networks and support systems that allow communities not only to survive but also to thrive psychologically as individuals. In cases where there is no option but to remove urban poor communities from their neighborhoods, such interventions, combined with community participation, have yielded better solutions based on local knowledge (Berke & Campanella, 2006; Cronin & Guthrie, 2011; Satterthwaite, 2011).

This study explores the benefits and dilemmas encountered during implementation of relocation programs designed to safeguard informal settlements from natural phenomena. It also aims to observe how participation or the lack of it has influenced the results. The research questions are: 1) How do informal settlers and government officials describe the relocation process designed to reduce disaster vulnerabilities? 2) What was the extent of the community participation in the relocation project? Our case study design includes collection of several forms of data from direct observations, interviews, and documents in the two selected relocation sites in the Philippines and Nicaragua. We chose these two countries because they recently received increased attention due to recurrent disasters and their governments showed a proactive attitude towards disaster management. On this approach, a variety of data sources allowed us to triangulate the evidence and thus corroborate the findings.

Our findings are based on interviews and field work observations of a total of 16 informal settlers and 18 government officials and NGO representatives from Nicaragua and the Philippines. While this research is still on-
going, preliminary findings show that there is a complex array of circumstances that guide the observed communities’ decision to locate and fight to remain on hazardous settlements. We found that these circumstances are not irrational in nature but rather grounded in commonly ignored aspects of the urban poor’s daily lives and struggles. We believe that inclusion of spaces to discuss such circumstances during the planning process could help achieve better and sustainable results for communities, local governments, and practitioners involved in relocation efforts.

References


Abstract Index #: 369
THE CITY THROUGH THE EYES OF ITS MOST VULNERABLE: ORPHANED YOUTH’S DESIRES FOR NEIGHBORHOOD CHANGE IN LUSAKA, ZAMBIA
Abstract System ID#: 746
Individual Paper

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Urban theory and development strategies in Africa are often based on western assumptions about urban social and economic development with little regard for local social and spatial organization. As a result, local perspectives, particularly from society’s most vulnerable are often omitted, giving rise to accusations that African urban development fosters spaces of exclusion rather than opportunity. The goal of this paper is to explore the perspectives of vulnerable populations in urban Africa through original research with orphaned youth in Lusaka, Zambia. It is estimated that out of a population of 16 million, 1 million in Zambia are orphaned children largely cared for by extended family as a result of high incidents of HIV/AIDS mortality. For this population, particularly those that live in low income or informal neighborhoods of the city, opportunities in life are highly constrained. This research engaged with members of this population through the use of photovoice, a participatory action technique whereby participants share their perspectives of their physical surrounding through photography and descriptive narrative, and focus group activities with a total of 50 individuals ages 14-18 years, including 18 individuals for photovoice and 32 for focus group activities in sessions of 8 each). The results present a unique narrative about the way these vulnerable individuals perceive and interact with their neighborhoods including their desires and prescriptions for neighborhood change and their priorities for urban development. Lusaka has a long history of informal settlement upgrading efforts including ongoing efforts to “regularize” existing neighborhoods. These findings inform not only our theoretical understanding of African urban space, but also provide inputs for urban policy including informal settlement upgrading priorities as well as the formal and informal regulation of urban space.

Abstract Index #: 370
RESISTING, PERSISTING, DEMANDING: GRUPO DE MADRES DE BARRIO ITUZAINGó AND THE AGRICULTURAL EXPANSION OF AN ABSENT STATE
Abstract System ID#: 751
Individual Paper
This paper examines the paradoxical absence of the state in a landscape defined by centralized, regional planning, focusing specifically on the social consequences of the rapid, state-sponsored expansion of genetically modified (GM) soybean production in the province of Córdoba, Argentina. This province has seen significant increases in the production and cultivation of soybean during the past 15 years, facilitated by national and provincial planning strategies. It is now widely known throughout the scientific and academic community that the production of GM soybean has led to environmental pollution and serious health illnesses due to the high levels of pesticides and chemicals the seed requires. Because of these health impacts of soybean production, various protest groups have been formed. This paper focuses on the work of the Grupo de Madres de Barrio Ituzaingó (referred to as Madres herein), a group of women in Ituzaingó, a small barrio in Córdoba. This group has worked to make visible the negative effects of the expansion of soybean in their neighborhood, starting with the first impacts noticed in the early 2000s: the death of friends and family due to agro-toxic illnesses, the increasing cancer rates throughout their community, and pollution of their surrounding environment (Berger, 2013).

While other environmental and community-based organizations have also been speaking up against this industrial agro-production, the Madres have become nationally recognized for their efforts to, as they say, “take care” of their children, families and neighbors because of their position as “mothers.” From the perspective of the Madres, they have stepped into this role as “caretaker” because of the paradoxical absence of the state: even though this agro-industrial landscape is a result of heavy regional planning intervention on the part of the Argentine state and the province of Córdoba, the state is noticeably absent in terms of securing the health of its citizens. This paradoxical absence of the state in a landscape shaped by regional planning has perpetuated environmental degradation, health-related afflictions, community tensions and discontent, and community isolation. As a result, community groups have stepped in to assume various roles of the state in what could be understood as forms of radical or “insurgent” planning (Friedmann, 1987; Miraftab, 2009). In this particular case, the Madres are drawing on gendered constructions of motherhood in their rhetorical strategies, as they seek redress from the absent state to not only “take care” of their children and family, but also their entire community.

This study draws on the conceptual network of political ecology (Peet, Robbins and Watts, 2011) in order to show that the state-led planning strategies used to further soybean expansion, while directly harming populations in a type of ‘silent’ and slow process of violence, also provides an opportunity for action, visibility and agency. Additionally, by drawing on literature in radical and insurgent planning (Friedmann, 1987; Miraftab, 2009), the case study highlights meanings of justice from the perspective of underrepresented groups as they struggle to access spaces and assume roles normally fulfilled by the state, while also adding an important gender component largely absent from the literature in insurgent and radical planning. Hence, the role of insurgent women is brought to the forefront and further problematizes claims for justice in the context of hegemonic forms of economic development and planning strategies, in particular industrial agriculture in the Global South (Sutton, 2010).

References
Intensified globalization allows transnational planning networks to promote various urban planning best practices to a greater numbers of cities around the world. These networks are comprised of organizations and individuals, e.g. governmental and non-government -policy transfer agents. China’s rapid urbanization and rising personal car use have spurred municipal leaders to seek out best practices to emerging issues of congestion, air pollution, and traffic safety. This research brings attention to the dynamics between policy seekers and policy providers focusing on two Chinese provincial capitals–Jinan, Shandong and Kunming, Yunnan. This empirical study relies upon ethnographic methods including in-depth interviews, participant observations, and document analysis of urban policies.

This study seeks to answer the question: What characteristics and conditions are necessary to be an effective policy transfer agent? Although scholars assert that transfer agents play an important role in transnational learning (Stone, 2004), scant research exists on what makes them effective. Findings point to three critical factors in determining the extent of their influence: status of their organization, professional capacity of their organization, and trust between policy transfer agents and their counterparts. In Kunming and Jinan, these factors culminated to support or hinder the learning of Chinese municipal organizations. In addition, the transfer agents influenced policy implementation. These findings provide for a greater understanding of the overall transnational learning process, the role of transfer agents in influencing the process, and limits to transnational learning. Through this work provides a more comprehensive understanding of the politics surrounding policy transfer and dismantles assumptions of top-down governance.

References

Can squatting become a viable housing alternative, particularly in a culture in which property is a sacrosanct component of both economic development and social reproduction? Since the onset of the crisis in Spain, thousands of families have experienced foreclosure and eviction. Induced to participate in the ebullient property market of a boom-time economy reliant on urban speculation, these households now face uncertain futures of increasing vulnerability and socio-spatial inequality. Such conditions are exacerbated by the retreat of the welfare state; austerity edicts have demanded privatization and the demolition of public programs and services, including the already scant provisions of social housing. At the same time, the country is literally littered with empty housing stock: some new estates turn to ruin as they lie fallow, while older units are hollowed by dispossession.
In response, the Plataforma de Afectados por la Hipoteca (PAH-Mortgage Victims’ Platform) has not only contested the effects of risky credit products and an unjust mortgage system, but also called into question the state’s capacity to govern in the face of such stark contrast.

Within these contestations, squatting has emerged as both strategic political tactic and equitable housing solution, gaining prevalence as a means to shelter the growing ranks of the urban poor. The re-emergence of needs-based squatting, however, is a surprising trend because of historical policies and attitudes towards private property, which has long been a central component to both urban economic development and social reproduction, made inviolate by both ideology and law. Looking to housing struggles in Madrid, I argue the scalar effects of austerity have reconfigured everyday citizens’ relationship to property and housing. As banks receive taxpayer bailouts, they continue to evict people, selling off empty units to international investment funds. Multinational EU mandates, national policies, and municipal debt conspire to unduly prejudice the domestic spaces of people suffering through unemployment and financial ruin. In light of the punitive effects of such an arrangement, people have turned to squatting as a means of not only housing themselves, but also claiming these spaces as inherently public. In the process, they vindicate the social function of housing over its use as investment tool.

In this presentation, I will draw on a year and a half of qualitative fieldwork. Relying on in-depth interviews, extensive participant observation, archival documents, and contemporary media, I argue people’s attitudes towards property have fundamentally changed in the six short years since the crisis began. I reveal how this shift has occurred through an emergent spatial common sense that privileges questions of justice and egalitarianism over consumption and the marketplace, in which housing is a key site for the articulation of alternative politics.

Ultimately, this presentation will seek to inflect existing literature on squatting and urban informality. Within the North Atlantic, squatting is often read as an ideologically motivated political act, linked to autonomous geographies of protest (Pickerill and Chatterton 2006; Martinez 2014). However, scholars working in the Global South call our attention to the ways in which urban informality is a common condition throughout contemporary city spaces, both as a tactic of the poor and as a more prevalent spatial logic (see for example: Roy and AlSayyad 2004; Yiftachel 2009). Through the case of squatting in Madrid, I reveal how changing property relations have contributed to new articulations of informality that destabilize traditional binaries of Global North and South. In disrupting these accepted categories of geographic thought, I argue housing is a crucial site for the construction of alternative politics within a moment of European protest.

References

Can cycling, as both a social and planning response, challenge trends in car dependence? In recent years, bicycling has proliferated in cities across the globe as a response to the perverse and continued dominance of the automobile. Transnational planning ideas such as public bike share systems encourage cycling as a mode of public transit and help reactivate public space. These efforts have resulted in an incongruent transit vision of the city, where bicycles attempt to humanize the city and increased automobile congestion and persistent building of super freeways continue to impact the daily lives of people moving around.

In particular, Latin American cities have widely adopted and implemented bike lanes; open street programs, and worked with international transit research institutes like Embarq or the Institute for Transportation and Development Policy (ITDP) to reconfigure transit goals in the city for people. Yet, these transformations have simultaneously taken place because of urban cycling movements, where a plurality of groups and actors outside of recognized municipal institutions have influenced the execution of bicycle infrastructure. This operates lateral to a confluence of regional experiments in mobility practices, increased traffic, and fragmentation due to privatized toll-ways across the Latin America region.

In this context, this paper explores the relationship between cyclists, transnational networks, and planning institutions in Quito, Ecuador. It uncovers how urban cyclists in Quito have reoriented bicycle-planning outcomes by working with international activists and organizations, as well as local institutions. Through these channels, the paper argues that daily spatial practices of cyclists have resulted in programmatic and policy-oriented planning outcomes that impede on the urban space of the automobile.

Based on on 16 months of fieldwork, this paper draws on qualitative and participatory research data, to illuminate how cyclists in Quito have changed the planning process through daily practices of moving around, activism, and working directly with local bicycle planners through the rhetoric of international expertise. It argues that efforts of cyclists make visible how citizens affirm their rights to the city while instigating new planning approaches that are needs-based. This work demonstrates how alternative practices can directly impact policy and practice in a global planning context.

References


Abstract Index #: 374
ON PLANNING AND THE SPATIAL TURN IN DEVELOPMENT IN THE GLOBAL SOUTH
Abstract System ID#: 851
Individual Paper

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There is not much consensus on what development and planning mean and how to understand the relationship between these two bodies of knowledge and practices as they relate to ordering territories. A brief survey of the planning literature specifically shows how the relationship between the two fields has rarely been clarified (Hart 2001, Robinson 2004, Roy 2002, Verdel 2004, Yiftachel 1989). This intertwining of not only discourses but also practices has been exacerbated by the fact that academic circles within the planning field (and the development field), for example, do not agree on how to define, theorize, and practice planning. This also highlights the rift
between what planning and planning mean in the Global North versus the Global South (Robinson 2004). This paper aims to explore this tenuous relationship between planning and development by examining their relationship in shaping the built environment in Lebanon in the 1950s-1990s, including the civil war years (1975-1990). The paper traces the knowledge production that circulated among planning and development experts over time, focusing on the changing relationship between the two fields and its role in shaping the uneven development of Beirut’s peripheries. This paper shows how from the 1950s-1980s development talk provided the contours within which urban planning thought and practice evolved in the city even during years of war. The paper then illustrates how planning practice in the 1990s after the end of the civil war was divorced — for the most part — from its task and hopes of development. The paper examines this spatial turn in development practice in Lebanon within a critical global moment characterized by neoliberalization and the end of the Cold War, and investigates the implications of this shift on the spatial production of Beirut’s territories of poverty. This shift in the approach of planning from the quests and questions of development centered on issues of poverty to an exercise in spatializing sectarian difference changed the discourse around Beirut’s southern peripheries from that of informal and poor peripheries to sectarian frontiers. The paper shows how this reformulation of the political consciousness vis-à-vis the periphery, its economy, marginality, and inhabitants has had major repercussions on poverty, segregation, violence, and environmental degradation. Learning from Beirut, this paper also aims to contribute to the larger discussion on what urban planning has come to mean over time and the material and social implications of planning practice in post-colonial cities.

References

Abstract Index #: 375
EXAMINING THE ROLE OF NEOLIBERALIZED PLANNING IN AUGMENTATION OF URBAN CONFLICT
Abstract System ID#: 868
Individual Paper

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In recent years, attention has been drawn to the fact that neoliberalism has significantly exacerbated urban conflict by increasing socioeconomic inequality. In fact, as idea that global capitalism could, or will, eventually solve urban issues such as socioeconomic contradictions seem increasingly unrealistic, some suggest that both central and local government should play the main role in mitigation of contradictions via reformed planning (Watson 2009). In politics and planning, some scholars rightly perceive urban conflict as a constitutive element of socio-political relations that is imperative for socio-political transformations. From this perspective, urban planning should provide adequate conditions under which antagonism as a destructive social phenomena change into agonism as a transformative potential (Hillier 2003, Pløger 2004). This paper will explain why neoliberalized planning is ontologically impotent to mitigate, or transform, urban contradictions and its symptoms such as antagonistic behavior. Conversely, the market-oriented plans and policies exacerbate antagonism in late capitalism. To develop this argument, the author will address how neoliberalism has reshaped welfare state into entrepreneurial state to operate effectively within the global market. Since plans and policies generally attain their legitimacy from central or local governments, the transformation of state apparatus has subsequently influenced planning and its functions.
From Deleuze and Guattari's perspective, the operation of the economic growth is the main objective of the capitalistic city. The growth largely relies on the constant flows of capital and non-capital (Deleuze & Guattari 1972). Thus, a capitalistic city competes with other capitalistic cities to attract the flows for its economic growth. Based on critical theories, the paper will reveal that the entrepreneurial state has largely deployed urban plans and projects as part of the city marketing. The neoliberal plans and policies promise, or fantasize, further capital surplus and enjoyment to their residents, international investors and immigrants. The deployment of ‘society of commanded enjoyment’ will assist to examine the role of neoliberalised planning in augmentation of socioeconomic contradictions in late capitalism (McGowan 2012). The paper will explain why these market-oriented plans are inherently unable to materialize their promises at least for the large number of their residents and new arrivals.

The paper will study Dubai and its development to show that how the implementation of market-oriented plans generates urban conflict. Dubai is generally recognized as a neoliberal utopia that has been instantly shaped based on the market values. Massive urban projects such as Burj Al-Khalifa, Burj Al-Arab, and Palm Islands have shaped Dubai’s brand around the world. Dubai with its luxurious hotels, gigantic shopping males, and theme parks promises advance enjoyment to its residents and visitors. In addition, Dubai is the primary trade hub in the Middle East region, the implementation of market oriented urban development polices combined with the tax-free policy promises high capital gain to international investors. Based on several interviews, this paper will argue that the neoliberal development creates discontents among its Arab residents and foreign labors in Dubai. In conclusion, this paper argues that the reformation of planning cannot singly mitigate urban conflict and its symptoms, but the reformation should be considered as part of replacement of the hegemonic ideology.

References


"CONTROL THE SOUTH": THE SPATIAL LOGIC OF DEVELOPMENT PLANNING IN URUMQI, XINJIANG BEFORE AND AFTER THE "7-5" RIOTS

Abstract Index #: 376
Individual Paper
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In the years since the Urumqi Riots of July 2009, both international and domestic media have chronicled the conspicuous militarization of the city’s public spaces and the expansive scope of an oppressive security apparatus charged with preventing ethnic conflict. In contrast, there has been little examination of the ways in which these riots affected profound changes in urban plans designed to engineer, if not ‘ethnic unity,’ then at least a future free of violent ethnic conflict. In this paper, I ask: in what ways do the post-2009 revisions to the city’s master plan and subsequent shifts in development priorities and land-use policies reflect the ways in which Urumqi’s local government has revised its answer to the so-called ‘ethnic question’ (minzu wenti)? With data gathered from interviews with planning officials and real estate developers as well as a comparative analysis of the city’s 1999 and 2010 master plans and related documents, I argue that changing emphases within development planning – and particularly the post-riot policy of ‘Control the South, Expand the North’ (nan kong, bei kuo) – are designed to not only rework Han-Uyghur relations, but also intra-ethnic relations among Uyghurs. Specifically, the municipal government intends to challenge the traditional ‘us-them’ ethnic divisions in Urumqi by
discouraging the growth of a distinct middle-class Uyghur lifestyle and instead selling the Chinese middle-class lifestyle to those Uyghurs willing and able to buy into it.

Abstract Index #: 377
INTERDISCIPLINARY SERVICE LEARNING AND THE CHALLENGE OF REPRESENTATION: STORIES OF STUDIO PEDAGOGY IN INFORMAL SETTLEMENTS IN SANTO DOMINGO, DOMINICAN REPUBLIC
Abstract System ID#: 915
Pre-organized Session: Beyond Boilerplate Participatory Planning: Notes from the Field

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Service-learning in informal settlements in the Global South faces particular challenges in terms of uneven relations of power and epistemological contradictions, especially when working in contested landscapes shaped by multi-scalar and historically contingent structures and processes. In particular, such power-laden social contexts present profound challenges in terms of visual and textual representation. A premium is often placed on the development of reports, plans, maps, and the like in service-learning pedagogy, in part because of the demands on instructors to deliver “products” to complex array of partners and audiences that often have contradictory expectations and requirements. Working in such fraught, even conflictual situations, when time is at a premium, funding is limited, and epistemological contradictions complicate decision-making in terms of design, data analysis, and textual production, critical reflections of the social and political implications of representations may give way to disciplinary norms associated with empirical measures of accuracy, legibility, and precision. In the case of service-learning pedagogy in informal settlements in Santo Domingo, Dominican Republic, four groups of students have conducted participatory research and plan-making to address infrastructure and solid waste management challenges in partnership with neighborhood organizations, civil society partners, and government agents. This work has resulted in an extensive production of visual and textual representations as well as video aimed at furthering capacities of residents, assisting in the development of community-based projects, and prompting engagement on the part of previously absent government agents and civil society organizations. The explicitly political approach to these service-learning projects, informed by work in radical and insurgent planning (Friedmann 1987, Holston 1995, Miraftab 2009) has prompted interdisciplinary pedagogical strategies to further critical reflexivity among students and project partners, including critical awareness of the rhetorical and social dimensions of students’ representation. The goal has been to foreground and critically assess the potential implications of students’ representations in the context of politically fraught and often disempowering discourses of informality and development, which has led to a reconceptualization of the “products” of service-learning pedagogy as unstable stories of engagement (Sandercock 2003) that are always subject to affective and unpredictable re-telling and reframing.

References

Abstract Index #: 378
SPATIAL ETHNOGRAPHY AND CRITICAL CARTOGRAPHY: NEXT-BEST ALTERNATIVES TO PARTICIPATORY PLANNING?
Abstract System ID#: 942
Pre-organized Session: Beyond Boilerplate Participatory Planning: Notes from the Field

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With the growth of Web 2.0, open source GIS, and Google maps, participatory mapping projects have grown considerably in the last decade. Community asset mapping, collaborative mapping, etc. have become a more common practice in planning as a way to make legible the views and aspirations of local constituencies, with the important potential to present their own knowledge claims to urban planning institutions (Kretzmann and McKnight 1993). However, other have noted that the participatory nature of these projects are suspect since they are usually initiated by outsiders and fizzle when the external funding ends (Ghose and Elwood 2003) and that they may not engender deep and empowering engagement (Ghose 2007).

But, the predominant focus on participatory mapping as the mode of critical mapping has obscured another line of inquiry not yet explored: might there be strategies of emancipatory visualization other than the participatory? This provocative question is posed not to devalue local knowledge and self-determination. Indeed, the point is that obtaining these may need a wider arsenal of strategies than the modes we currently employ.

One of the obvious reasons for needing other modalities of critical cartography is when working in undemocratic places with non-participatory planning institutions. This paper presents two critical cartography projects that the author undertook: mapping street vendors on the sidewalks of Ho Chi Minh City (Kim 2015) and mapping the subterranean migrant housing market in Beijing. In both Vietnam and China, citizens cannot hold meetings without approval, state representatives govern at the neighborhood level, the press is state-owned, and city plans are designed by experts. This paper considers the use of spatial ethnography and directed collaboration as an alternative to participatory mapping, both its potential and limitations, as well as consider the experience of teaching these methods to Vietnamese and Chinese college students.

References

Abstract Index #: 379
FLOODING AND URBAN POLITICS IN ASIAN COASTAL MEGACITIES
Abstract System ID#: 949
Individual Paper

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Recent research has found that 15 of the 20 cities that will experience the greatest increase in populations vulnerable to chronic flooding as a consequence of sea level rise by 2070 are in Asia (Hanson et al 2011). The threat of sea level rise will only further increase the probability of devastating floods that are already causing widespread damage and displacement in many coastal cities. Floods causing severe loss of life and property damage hit Jakarta in 2007 and 2013, Bangkok in 2011, Manila in 2009, and Mumbai in 2005, to name but a few examples. While a substantial amount of research has explored the implications of climate change and sea level rise for flooding, and for the potential permanent inundation of significant parts of Asian coastal megacities, examinations of the new political pressures created by climate change and increasing hazard exposure have been relatively rare. This paper will develop a theoretical framework for examining the implications of chronic flooding for urban politics in Asia. It poses the following questions: How is flooding, and the threat of climate change induced inundation, reshaping the terrain of urban political power and contestation in Asian coastal cities? Specifically, what pressures are state actors facing to rescalse and reconstitute their action in the face of climate change induced hazards, to confront mounting pressures and threats both from vulnerable communities and
from much larger regional and watershed scale forces of change? The paper does addresses these questions through a review of literature on hazards and urban politics in Asian coastal cities.

In focusing on the question of the scales of state action, the paper also seeks to inform debates on the rescaling of the state in the current era of increased global economic interconnectivity. Brenner (2003) has argued that, in the context of growing global economic competition and neoliberalization of policy, state actors have increasingly focused on cities and urban regions as key scales for capital accumulation. As a consequence cities have become “geographical targets for a variety of far-reaching institutional changes and policy-realignments designed to enhance local economic growth capacities” (Brenner 2004:3). These growth-driven pressures elicit a national state focus on reforms in governance aimed at fostering entrepreneurialism in city government, and a focus in infrastructural investment on shaping metropolitan regions as magnets for corporate investment. Yet the threats of chronic flooding and climate change induced inundation place a very different set of demands on governments than those dictated by this more limited and entrepreneurially focused agenda. They call for massive state infrastructural investment and regulatory interventions at the scale of watersheds, while also calling for new modes of interacting with vulnerable communities at the grassroots. Hence a central hypothesis explored in this paper is that chronic flooding and the threat of permanent inundation is creating new sites of political conflict that have the potential to force a fundamental rescaling of state action.

References

Abstract Index #: 380
THE IMPACT OF LAND VALUES ON COMMUNITY LOANS FOR HOUSING: THE CASE OF MANILA
Abstract System ID#: 967
Individual Paper
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Over the past fifty years, the Philippines has been experiencing rapid urbanization. Formal housing development and service provision have been unable to keep pace with the population growth, and around a third of Metro Manila’s population has found alternative living situations in slums and informal settlements (Ballesteros, 2010). Past housing strategies have had limited success. Recognizing the serious need for more housing, the Philippine government set a goal for itself: from 2011 until 2016, it would provide 1.47 million units of housing through direct assistance, and a large part of this through community-based lending and redevelopment programs. While some portion of these people are being resettled to less environmentally and geographically vulnerable areas, the government has committed to enabling the majority of these informal settlers to remain in their current locations. But given the rising values of land in Metro Manila, the cost of the in-situ approaches is higher than the resettlement alternatives. The question remains that if these costs are transferred to the predominantly poor settlers on the land (Mukhija, 2002), will they be able to afford the upgrading process?

Since 1988, the Philippine government has been financing a Community Mortgage Program in order to provide communities living on untenured land with loans to purchase the land. A 2004 analysis of the program found that successful repayment was dependent on the degree to which the community was organized prior to receiving the loan (Ballesteros & Vertido, 2004). My study integrates the quantitative research into the Community Mortgage Program done in this study with a spatial analysis of land values. By adding this geographical element into the study, I determine how differing land values factor into the success or failure of community loans. I complement this work with qualitative research in the form of a series of interviews with community members receiving the
loans, as well as staff at nonprofit organizations and national housing agencies working with the communities on these programs.

References


FROM MISSING LINK TO A MISSED OPPORTUNITY: COMMUNITY-BASED ORGANIZATIONS IN URBAN UPGRADE IN INDONESIA

Abstract System ID#: 969

Individual Paper

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Community-driven development (CDD) programs (Mansuri & Rao 2004, 2013) in developing countries, facilitated by neoliberalism (Craig & Porter 2006) and decentralization (Beard, Miraftab & Silver, 2008), project community-based organizations (CBOs) as key interlocutors (de Wit & Berner 2009) in new, participatory institutional arrangements for urban planning and poverty alleviation (Satterthwaite & Mitlin 2014). Yet, scant research (Doughlass 1992), compared to that on NGOs in developing countries, explains why the capacity and effectiveness of CBOs vary in urban upgrading, especially within the same program. By focusing on CBOs created exclusively to implement the Comprehensive Kampung Improvement Project (CKIP) – a local urban upgrading effort – in Surabaya, Indonesia, this paper’s objectives are twofold: 1) explain impediments posed by pre-existing local institutional arrangements in the path of creating empowered CBOs; and 2) clarify how CBOs’ organizational and management characteristics – composition, human resources, representation, decision-making processes, etc. – impact their ability to manage community-based microfinance funds, thereby causing divergent outcomes. Rich qualitative data acquired over nearly a decade of longitudinal research in Surabayan communities, including a survey of 65 CKIP CBOs, allow for a mixed-methods analysis that yields multiple insights. The findings are not just instructive for Surabaya’s own future efforts; they also further our understanding (UN-Habitat 2001) of essential aspects of institutional arrangements and program design that developing cities’ planners, more generally, ought to consider whilst embarking on CBO-led microfinance/upgrading for greater inclusivity and sustainability.

References

In Latin America, the last forty years of fiscal and political turbulence have contributed to an “infrastructure gap”. Yet anecdotes of capital investments in critical infrastructure that remain unfinished following a transition of political power are common. This case study of the Metropolitan Zone of Guadalajara, Mexico uses process tracing to investigate the factors that contribute to the continuity of metropolitan-scale infrastructure implementation across political administrations in the water/sanitation and transportation sectors. Thirty-two interviews with stakeholders from multiple public administrations, NGOs, and the private sector, as well as legislative and project finance documents, state budget and construction payment records, and reports from local civic organizations, were consulted to construct a portfolio of projects ripe for continuity by the current administration. Using these materials, this case study also explores the barriers to and contributing factors of continuity across the most recent political transition. National environmental rules and project finance, a requirement for financial obtaining support from the national infrastructure fund, directly resulted in the continuity of the two projects that weathered the most recent changes in state government administration. Weak evidence of clientelism also underpins the continuity of the two surviving projects.

Despite the continuation of two projects following the 2013 gubernatorial transition, the trans-administration continuity of future capital investments in critical infrastructure is threatened by significant formal and informal barriers. Ad hoc capital investment budgeting and prioritization, limited mechanisms for multiyear budgeting, and the persistence of the legal practice of preventive jailing, when fused with the legacies of fiscal volatility, embedded fear of authoritarian control, and the culturally-ingrained notion of impropriety associated with administration-spanning projects, will continue to affect capital investment continuity in Mexico. Filling the critical “infrastructure gap” in Mexico, as well as in other Latin American countries with similar political and economic histories, depends on the consideration of these constraints to capital investment continuity.

References

1997, 2000, 2007), I evaluate whether households who lost access to publicly/communally provided farm lands experience significantly greater reduction in their incomes and expenditures from similarly situated agricultural households. I then assess whether short term lag in poverty reduction at the regional level can be attributed to such income reductions experienced by peasant agricultural households.

Recent empirical research has been predominantly supportive to the policy of promoting urbanization in rural areas and secondary towns. Urbanization of rural areas has been said to lead to: the diversification of the rural economy; local transition from agriculture to nonfarm production, and consequently; faster poverty reduction (e.g. Christiaensen 2013, Christiaensen & Todo 2014). However, it has been predicted that a majority of poor people in developing countries will still live in rural areas long after most of the population urbanize (Ravallion 2001).

Most of research on this topic has applied either the lens of human geography or economics to investigate the processes of urbanization. From those perspectives, urbanization is operationally defined as (1) locational shift, the increasing proportion of the urban population through migration channels, or; (2) sectoral upgrading, changes in the regional industrial structure, from predominantly agricultural into manufacturing. Very few research, if any, has applied the environmental geography lens, which perceives urbanization as a change to the physical landscape of predominantly rural areas. As the rural agricultural economy shifts to manufacturing, the rural environment simultaneously experiences extensive land use conversion from farmlands to industrial, commercial, and residential functions.

Many landless peasant households in developing countries depend on publicly or communally provided lands for their agricultural production. When these farmlands are converted, peasant agricultural households will suddenly lose access to productive farm lands. It often leads to involuntary displacement of farm labors from their jobs and sudden shock in peasant households’ income. This phenomenon have received very little attention because established literatures in development economics tend to focus more on the long-term impact of structural changes in the economy. On the other hand, while the social costs of such structural change, i.e. job and income loss, occur in the short and medium terms, they can bring long-term negative consequences to the welfare of affected households. This research emphasizes on the importance of doing impact analysis of urban and regional development policies at the household level, in addition to the common economic analysis at the regional level.

References

Abstract Index #: 384
ALTERNATIVE APPROACH OF EXPOSURE AND VULNERABILITY ASSESSMENT FOR LAND USE PLANNING - A CASE OF QUY NHON CITY, CENTRAL VIETNAM
Abstract System ID#: 999
Individual Paper
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Normative prescriptions often differ from practical experiences because the practice of planning is more complex than what theoretical prescriptions might suggest. Today, different planning approaches inform the practice of disaster management (preparedness, mitigation, response and recovery). Land use planning has been a key tool and approach for disaster mitigation (Burby, 1999; Burby, Deyle, Godschalk, & Olshansky, 2000); its effective accommodation in disaster management calls for spatial vulnerability and exposure analysis. Planning for resilient community means taking into account of spatial exposures and vulnerabilities in the planning process.
But approaches to vulnerability analysis vary a lot – some more qualitative and community-based, others more technocratic and data-driven. Little research, however, has explored how both these methodological approaches can be used together for making land use decisions that augur long-term disaster resilience. This paper tries to address this gap with a case of Quy Nhon City, Central Vietnam, where flooding and typhoons are frequent and devastating. Vietnam’s planning system is yet top-down and technocratic, where the master plan, bound by national and provincial priorities and targets, guides city development. In general, the consideration of disaster vulnerabilities and exposure is a technocratic, data-driven process, not community-based. Using two separate assessments of exposure and vulnerability – 1) a 360-household survey to understand people’s perceptions and experiences of flooding and typhoon over time, which identifies perceived, as well as real, vulnerabilities and exposure; and 2) a spatial analysis based on interpreting time series aerial imagery using GIS and remote sensing, which ascertains the areas actually most exposed and vulnerable to flooding and typhoons – this paper attempts to identify discrepancies between people’s perceptions and state action, as well as perceived and real threats. Based on an investigation of two wards of the city (Nhon Phu and Nhon Binh), this paper’s main contribution is methodological – to propose a combined approach for vulnerability and exposure assessment for better informed land use planning decisions toward community resilience.

References

Abstract Index #: 385
MAKING PUBLIC OPEN SPACES ACCESSIBLE TO UNDERSERVED POPULATIONS IN URBAN VILLAGES
Abstract System ID#: 1002
Individual Paper
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Slums are generally viewed by urban planners as physically incompatible with formal urban planning because these areas are often overcrowded, structures violate local building codes, and/or dwellers reside under substandard living conditions. However, slums also provide extremely affordable living spaces for low-income people. Urban villages (UVs), as a unique form of slum in China, have emerged as a result of China’s dual land ownership arrangement and its vast pace of urbanization (He et al., 2009). Developed from rural settlements, UVs represent an existing conflict between the original rural development purpose and the new urban development reality. Public resources, such as infrastructure and social services, have been poorly provided in these areas. The majority of residents in UVs are low-income, migrant workers. Unfortunately, the needs of these migrant tenants for a quality living environment have not been sufficiently incorporated into cities’ urban planning policies.

Most research on urban villages in China suggests a complete elimination of the areas. Similar to many slum-clearance policies, the Chinese government’s general approach is to tear down existing buildings, relocate residents to public housing, and redevelop the slum areas in accordance with the city’s Master Plan. This paper, however, argues that, rather than “comprehensive redevelopment” of UVs, “incremental upgrading” approach should be better understood and therefore be pursued by Chinese planners during the course of urbanization.

The purpose of this study is to explore the question: How can planners make public resources accessible to underserved populations in China’s UVs? More specifically, it examines the usage of Public Open Space (POS) by UVs’ residents, using a case study of Baishizhou Village, the largest urban village in Shenzhen, China. Through a
questionnaire survey of 150 POS users and 10 in-depth interviews with public officials, residents, and design professionals, our findings suggest that, in the planning process of POS, planners’ narrow understanding of the functionality of POS constrains the efficacy of this slum upgrading approach.

References


Abstract Index #: 386

PLANNING THROUGH SPACES OF EXCEPTION: SOCIO-SPATIAL MARGINALITY, VIOLENCE AND THE EMERGENCE OF SOCIAL URBANISM IN MEDELLIN

Abstract System ID#: 1022
Individual Paper

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Medellín, a city known as one of the most unequal and violent in the world, has recently been praised as an example of urban innovation. Grounded on claims to social justice and democracy, mayors Fajardo (2004-2007) and Salazar (2008-2011) adopted a policy called social urbanism. With this approach, Medellín expanded infrastructure and social investments to marginalized districts, instituted participatory programs, and sought to integrate precarious enclaves in the “formal” city through transit policy, public spaces, and emblematic architecture.

This paper is about the emergence of “social urbanism.” It seeks to reveal its origins, political rationalities, and tactics on the ground. Based on document analysis, semi-structured interviews with key actors, and focus group data, I examine the connections among socio-spatial marginality, conflict, urban politics, and entrepreneurial urban governance arrangements. Most crucially, I identify the gaps and ambivalences that emerge between the politics of three disparate logics at play: first, goals of development and socio-spatial redistribution; second, the pressures cities face to repair local economies and attract foreign resources; and third, the influence of violent actors, including both organized crime and the repressive arm of the state.

While the promises of social urbanism are commendable and have been loudly conveyed internationally, an analysis of social urbanism at the neighbourhood scale reveals a mode of emergency planning that turns areas of intervention into spaces of exception from city ordinances and governance arrangements. Through a large-scale Urban Development Project approach, social urbanism seeks to expedite implementation and generate a swift sense of transformation. I argue that, the implications of relying on exceptions need to be carefully considered since vested interests can easily co-opt the planning process.

Furthermore, violence, and social and economic dislocations in the city are still profound, particularly in areas such as Comuna 13, where non-state armed groups prevent residents from capturing many of the benefits of urban upgrading. Despite new public works projects and state presence, criminal networks have retained their territorial influence. Because Medellín’s urban innovations are being implemented along the ongoing sway of illegal violent actors, governance in these spaces can be characterized as a contradictory “orderly disorder.”
PLANNING FOR DISASTER RESILIENCE: LESSONS FROM THE RECOVERY AND RECONSTRUCTION AFTER TYPHOON YOLANDA IN THE PHILIPPINES

Abstract System ID#: 1029
Individual Paper

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On November 8, 2013, Super Typhoon Yolanda, known internationally as Typhoon Haiyan, hit the Eastern Visayas and surrounding regions in the Philippines, its unprecedented storm surge leaving more than 6,300 people dead and nearly 29,000 persons injured. The government enacted the Philippine Disaster Risk Reduction and Management (DRRM) Act in 2010 to improve the disaster resilience of communities in one of the most disaster-prone countries in the world. When the typhoon arrived, however, the country was unprepared to deal with a mega-disaster like Yolanda. After the disaster, the government launched efforts to improve the disaster risk reduction and management framework, with assistance from international organizations and donors. In order to improve disaster resilience, this paper discusses the issues and problems associated with the DRRM institutional framework in the Philippines, especially regarding the planning system, by examining the recovery and reconstruction process after Typhoon Yolanda.

A community’s disaster resilience can be enhanced by reducing that community’s vulnerability. Vulnerability to disaster is based on the community’s hazard risk, preparedness, adaptive capacity, and socio-economic characteristics, among other things. In developing countries like the Philippines, DRRM is integrated into the development process under the slogan of sustainable development. The Philippine DRRM Act stipulated mainstreaming DRRM in various development plans, such as Comprehensive Land Use Plans (CLUP) and Comprehensive development plans, among others. Local Government Units (LGUs) are in charge of policy making for and implementation of DRRM programs and projects. LGUs have developed Local Disaster Risk Reduction and Management (LDRRM) Plans and established LDRRM Offices. Despite initiatives for the improvement of disaster resilience, at the time of Yolanda, DRRM institutional development was only half complete at both the central and local levels. After the disaster, the government took action to improve the DRRM system. In line with the Act, international organizations as UNDP rushed to assist the LGUs in mainstreaming DRRM in CLUPs, long-term development plans of local governments. A new guideline for CLUP preparation was issued to incorporate climate and disaster risk assessment (CDRA) in the planning process.

Nevertheless, the Philippines’ local planning system is not necessarily effective at promoting and guiding development and land use. The planning offices of LGUs are overwhelmed by preparing the many plans required by different national agencies; in addition, they lack sufficient capacity, resources, and support. Not all LGUs have finished preparing CLUPs, the master plans of LGUs, and other required plans, and for LGUs with CLUPs, it is uncertain if the plans have been effectively implemented. Inconsistencies have also been found in land use or infrastructure proposed in the CLUPs of neighboring LGUs due to a lack of coordination between LGUs and fragmented political institutions. Adding the requirement of preparing an LDRRMP and performing a CDRA to the CLUP planning process would place an additional burden on LGUs. Hence, the Philippine DRRM institutional framework’s strong reliance on the LGUs’ planning and implementing capacity is not necessarily expected to
result in improved disaster resilience because of the issues and constraints inherent to the planning system and local institutions.

This research thus examines ways in which the Philippine DRRM institutional framework can be improved, focusing on the local planning system, based on insights gained into the recovery and reconstruction projects after Yolanda in the Eastern Visayas Region while working as a consultant for a bilateral donor from April 2014 to February 2015. The paper analyzes theories related to disaster resilience improvement, planning system issues and problems, and the DRRM institutional framework of the Philippines, and reviews international assistance with disaster recovery and reconstruction, in order to provide recommendations for enhancing disaster risk reduction and management institutions.

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ESTIMATING TENURE SECURITY PREMIUM IN INFORMAL HOUSING MARKETS: AN APPLICATION OF SPATIAL HEDONIC METHODS TO SLUMS IN PUNE, INDIA

Due to the inadequate supply of affordable housing in the formal housing markets, a vast number of people currently reside in informal settlements in the rapidly urbanizing Global South. Those people tend to be vulnerable to the risk of forced eviction because of the lack of land ownership and other reasons. Some scholars and policy makers regard the formalization of informal land tenure as an effective approach to enhancing the tenure security of the residents of informal settlements (Payne, 2001). However, another strand of literature emphasizes the importance of de facto tenure security that is shaped by a variety of non-legal factors (Doebele, 1987). A critical question is: to what extent can formalized land tenure benefit the residents of informal settlements in the presence of other legal and non-legal factors that contribute to their de facto tenure security?

My paper addresses the empirical question above by focusing on Pune, India. In Pune, where a third of its three million population live in slums, government agencies have formalized some slum settlements under “slum declaration” policy. Residents in formalized slums, or “declared” slums, are legally protected from forced eviction without due legal process and compensation. I examine how slum residents evaluate the benefit of slum declaration through a spatial hedonic approach.

The data for this study comes from the following two surveys. I collected surveys from 562 households in 56 slums in Pune in 2013. The survey data contains detailed information about housing, household, and slum characteristics. In addition to the primary survey data, I draw on the Pune Slum Atlas, which was prepared by a local non-profit organization based in Pune. I mainly retrieved slum-level information from the atlas.

As reviewed by Payne, Durand-Lasserve, & Rakodi (2009), the quantitative analysis of the impact of land tenure formalization has been scarce. In particular, analyzing informal housing markets through hedonic models has been a rare endeavor to date (an example is Crane, Diniere, & Harwood, 1997) mainly due to the lack of reliable data. Despite the richness of information in my data, the estimation of the slum declaration premium still can be biased due to unobserved heterogeneity. My paper deals with this problem by taking advantage of a recent spatial econometrics model, the generalized spatial two-stage least squares (Kelejian & Prucha, 2010), which accounts for spatial effects and heterogeneity. To the best of my knowledge, this is the first application of such spatial hedonic model to urban slums.

This paper finds that the estimated premium of slum declaration worth 18% of the average housing rent in slums, and that the associated marginal willingness to pay is 6% of the average household expenditure in Pune slums. This finding suggests that even if it does not provide full property rights, slum declaration has benefited slum residents by ensuring their occupancy.
REFERENCES


ABSTRACT INDEX #: 389

CREATING SPACE FOR THE FORMAL AMONGST THE INFORMAL: AN EXAMINATION OF URBAN HOUSING POLICIES AND CHANGING COALITION POLITICS IN INDIAN CITIES

Abstract System ID#: 1038
Pre-organized Session: The Politics of Making and Re-making: Transnationalism, Circulation and the Emergent in Urban and Community Development

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To address the proliferation of urban slums, in 2005 the Government of India inaugurated its most ambitious urban housing policy since Independence. The Basic Services for the Urban Poor (BSUP) scheme aims to improve the living conditions of the poorest living in Indian cities by providing improved housing and basic infrastructure. While the goals driving BSUP are laudable, meeting the objectives of this ambitious policy has proven challenging for urban governance institutions, and the policy has been widely criticized for failing to provide the quantity and quality of housing required to meet the needs of the urban poor.

In the south Indian city of Bangalore, however, urban governance institutions have produced housing in large numbers under BSUP. During the five years since implementing agencies began work on BSUP, more units of housing were built than in the previous 30 years combined, raising doubts as to whether the policy has been an outright failure. Rather than advancing yet another critique of the policy, therefore, this research examines how urban governance institutions can and do produce housing for the urban poor. Drawing on 14 months of ethnographic data collected in Bangalore between 2012 and 2014, I trace the implementation processes of three BSUP housing projects in the city. Specifically, I focus on the motivations and strategies of state and non-state actors as they seek to meet policy objectives and produce outcomes under BSUP. I find that project processes and local outcomes of this federal housing policy depend on unique, multi-scalar assemblages of state and non-state actors mobilizing both formal and informal processes for a given project. While existing literature on urban governance in India has highlighted the role of informal coalitions in a number of cases—slum rehabilitation, urban land acquisition, etc.—this approach has largely ignored the meso-level political-institutional structures that shape the actions of actors. In fact, most research on urban India assumes that institutional procedures are largely flouted as actors choose to work through informal social networks to achieve various goals.

This literature also tends to limit the scope of action for various actors to particular scales. With the emergence of BSUP—a results-driven policy characterized by strict deadlines and oversight at all levels of government—new institutional structures have been created, opening up opportunities for actors to mobilize formal channels to influence policy processes. This has had numerous effects on urban governance. Actors who were previously excluded from informal channels utilize policy procedures to insert themselves into urban processes. Further, when implementation agencies are not performing, state and non-state actors strategically use policy structures to circumvent the agency, often employing multi-scalar tactics to pressurize nonperforming actors to produce outcomes. In this sense, the actions of groups are not restricted to specific scales, as multi-scalar assemblages prove most effective in achieving policy outcomes.
The findings from this research, therefore, not only improves our understanding of housing and urban planning policies in India, but also sheds light on how multi-scalar governing processes shape developmental outcomes in newly urbanizing contexts of the Global South.

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Abstract Index #: 390

BARRIERS TO INTEGRATION OF INFORMAL TRANSPORT: THREE CASE STUDIES

Bus rapid transit (BRT) has become a global phenomenon over the past decade. This trend is especially prominent in the Global South, where many cities are using new publicly operated BRT lines to replace or restructure privately-provided and often unregulated jitneys, passenger vans, and other small shared vehicles, or what we refer to here as “informal transport.” This practice raises a number of questions, and we focus on two. First, how should informal transport be incorporated as public transport becomes formalized? Second, what approach for integration is likely to be successful, given wide variations in local context?

Salazar Ferro et al (2012) investigated potential operational structures available for integrating formal and informal services with BRT, showing the strengths and weaknesses of various route structures and payment schemes available to cities. Yet in many cases, a larger barrier to integration is not physical or design considerations, but rather the greater political and economic contexts that influence how policy-makers and politicians engage with preexisting operators. As Flores Dewey (2013) noted in the cases of Mexico City and Santiago, decisions on how to improve the transportation network were highly dependent on the pre-existing structure of the paratransit sector and their relationship with the governing authorities.

For this paper, we are carrying out a qualitative analysis of the historical context for BRT projects recently realized in three Global South cities: Cape Town, South Africa; Barranquilla, Colombia; and Quito, Ecuador. Each city has attempted a unique approach to incorporating the informal transport sector into the new BRT network, and each has done so with varying levels of success. To shed light on the historical context guiding the development of BRT in each city, we interview key stakeholders active in the sector, as well as informal transport operators.

Our preliminary findings suggest that the particular integration approach proposed for each system was less decided as a matter of operational efficiency and more a function of the short-term political constraints on leaders at the time. Ultimately, our research seeks to mend the literature on the politics of transportation planning in the Global South with the literature on the operational design of integrated systems to identify approaches that reconcile the reality of short-term political interests with feasible integration approaches that adapt to the political realities at the time.
A SOCIAL PERSPECTIVE TO SOLID WASTE MANAGEMENT: GREEN EXCHANGE AND WASTE PICKERS IN CURITIBA, BRAZIL

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Solid waste management is one of the most vexing issues for cities. In the developed world, landfills are reaching capacity and several cities are at different stages of implementation of recycling programs and mandatory bans on organic waste from collected garbage. In the developing world, while some cities do not even have regular garbage collection, others have found innovative, alternative ways to not only collect, but also recycle waste, reducing pollution in the built and natural environments and creating opportunities for improved and productive livelihoods.

One such city is Curitiba, a primate capital city of about two million people located in southern Brazil. More than 20 years ago, Curitiba implemented programs that would jointly address environmental and social problems in a rapidly urbanizing but not highly developed city. This paper looks at two different strategies used in Curitiba to address solid waste problems. One, the Green Exchange program, was conceived and is managed by the local government and exchanges local produce for garbage; the other, waste pickers’ cooperatives, is a grassroots initiative that not only turned into a profitable business, but also became the main source of income for thousands of families living in informal settlements.

The central purpose of this research is to determine how effective alternative replacement and recycling programs can be in contributing to solid waste management in major cities. A historical overview of the Green Exchange program and the formation of waste pickers cooperatives in Curitiba, Brazil, illustrates two different approaches: one driven by the local government, institutionalized, and supported by tax payers, the other created out of necessity, entrepreneurial in nature, and grounded on informality. The effectiveness of these two approaches is evaluated both quantitatively and qualitatively. Quantitative data shows not only the amount of garbage collected through these two different means and the decrease in landfill volume leading to an extension of time to full capacity, but also the number of jobs created and families whose livelihoods depend on these initiatives. Qualitative data shows socio-economic, environmental, and political advances resulting from these approaches to solid waste management. Ultimately, the goal is to demonstrate that unorthodox alternatives to formal urban management systems can have positive outcomes and externalities.

This research is relevant to all urban places looking for innovative ways to diminish their solid waste footprint and to create less polluted cities, especially those with scarce resources, while fostering healthier and better nourished populations and creating jobs. The Curitiba experience suggests that alternative solutions to solid waste management that involve the community in the arduous task of reducing and managing solid waste can be successful with or without the support of local governments.
Since 1978, China’s Reform and Opening policy has brought rapid urban growth and industrialization, but industrialization is occurring unevenly across the country. From 1980 to 2013, the urbanization rate increased from around 19 percent to more than 50 percent (National Bureau of Statistics of China). Inland laborers cannot find work while coastal employees cannot fill jobs. To solve the problems China’s central government announced three important policies of industrial readjustment and transference in recent years. The effect has not been notable, which leads to the question of how China can predict and influence its regional industrial development.

The objectives of this research were:

• to identify the most suitable models of regional development to explain industrial transference observed between China’s coastal region and its interior and

• to measure if China has the potential to follow the industrial transference modes from the chosen models.

To explain industrial transference and readjustment, six potential regional theories were considered. The Flying Geese Model suggests production of commoditized goods moves from developed countries to developing countries in a pattern resembling how geese fly in a skein. The Product Life-Cycle Theory indicates a similar process that further labels three gradients of production: new, mature, and standardized. The Pole-Axis Development Theory traces regional economic development along corridors of transportation, waterways, and energy lines. Location Theory, New Economic Geography, and Cluster Development offer models of regional economies according to spatial allocations of lowest production costs; industrial core and agricultural periphery; and, well-functioning clusters, respectively.

Qualitative analysis included SWOT and descriptive data analysis to compare theoretical model patterns against China’s actual regional industrial development trends. This examination identified applicable models from the six potential models of industrial transference and adjustment. Two theoretical models were selected: the Flying Geese Model and Cluster Development.

Quantitative inquiry included an empirical analysis and model testing to examine if China already has industrial transference following one or both of the chosen models. The empirical analysis explored the key variables of factories, gross domestic product, and employment using a Gini coefficient. Dummy coding indicated capital flow
among regions to measure potential to follow Cluster Development and changes of industrial output among regions to identify if industrial transference has followed the Flying Geese Model. The research indicated that after 2005, industrial development followed the pattern of the Flying Geese Model and the Cluster Development in some areas of China. This result has provided foundation for further model implementation and prediction.

References


Abstract Index #: 393

CROSSING BOUNDARIES EVERYDAY: ENGAGED RESEARCH AND LEARNING AT THE NILGIRIS FIELD LEARNING CENTER, INDIA

Abstract System ID#: 1093
Pre-organized Session: Beyond Boilerplate Participatory Planning: Notes from the Field

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Each morning, a group of students at the Nilgiris Field Learning Center (NFLC) in the hill-town of Kotagiri start the day with a “Crossing Boundaries Exercise”. The students include young men and women from surrounding adivasi (indigenous) communities and an equal number of undergraduates from various Colleges at Cornell, all of whom are spending 15 weeks at the NFLC, an interdisciplinary collaboration between Cornell and the Indian NGO, the Keystone Foundation. Dubbed the CBE, these exercises are pedagogically straightforward: at one level they support situated conversational Tamil and English language learning around a gamut of issues. Each exercise is carefully curated: the framing issues echo and introduce the week’s learning theme, just as they emerge from research projects that are generated through on-going conversations with community members and Keystone staff. What has proven just as interesting is the ways in which the CBE open up conversations across groups in the NFLC: difficult boundary spanning conversations that the project partners see as essential to the goals of building the capacity of community members, researchers, future policy-makers, global citizens to plan and manage for right livelihoods and sustainable development in fast-changing complex ecological landscapes like that of the Nilgiri Biosphere Reserve (NBR). Describing the CBE, its planning, structure and outcomes, allows this paper to get to the heart of a set of issues that shape and condition interaction and engagement – processes that are central to participatory planning in complex settings.

The NBR provides such a complex planning context. A global ecological diversity and endemism hotspot spanning 12 districts in three states, it contains an astonishing diversity of cultures and communities including more than 30 adivasi groups who, at about 16 percent of the total NBR population of 1.2 million people, are among the region’s poorest and most marginalized. The adivasi make their livelihoods through a combination of strategies that include subsistence agriculture, growing small quantities of commercial crops, wage labor in plantations and other regional industry, and gathering non-timber forest produce for sale and consumption. As important is rapid urbanization and the challenges and opportunities this presents. The Nilgiris district, where the NFLC is based, is about 59 percent urban according to the 2011 Indian census. For planners, the NBR also presents unique governance challenges with multiple states and different political economic systems at work. Several institutions and organizations play a role in a single district within the reserve: Forest and Wildlife Conservators; District Administration with elected representatives and administrators; the presence of Central and State Government
agencies and programs; social groups based on caste, religious, or occupational affinities; numerous NGOs; and
networks of businesses in a thriving economic base of tourism, expanding plantations, and growing
industrialization that favors outsiders and urbanites. In addition to these formal organizations and the associated
divisions of labor and authority, there are the interrelated informal institutions that structure locally embedded
economic relations in communities, landscapes, and sectors. For example, to enhance conservation of a
particular ecological community and the health and livelihood benefits associated with that community, be it
forest honey, medicinal plants, an endangered species or a water stream polluted by dumping of human or
industrial waste, we need to develop an understanding of the public policies, private interests, and collective
norms that structure access.

This brief description serves to underscore the complexity of the situation NFLC researchers and students face as
they forge sustained partnerships to tackle pressing issues. This paper will approach some of the challenges
through the lens of the CBE, the everyday exercise that epitomizes the many boundaries of culture, world-view,
and disciplines that the NFLC community seeks to transgress.

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  India: Sage Publications

Abstract Index #: 394
PLANNING BETWEEN THE LONG NOW AND TOMORROW'S YESTERDAY: MULTI-SCALE SOCIAL-ECOLOGICAL
RESEARCH AND ACTION IN TIMES AND PLACES OF RAPID DEVELOPMENT
Abstract System ID#: 1091
Pre-organized Session: Beyond Boilerplate Participatory Planning: Notes from the Field

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Planners naturally struggle to achieve a balance between the poles of multiple axes, among which are: the need
for short-term action, and long-term monitoring, data-gathering, analysis and sustained evaluation; the
application of specialized scientific expertise, and the broadening of social participation in decision-making; the
mobilization of existing power centers, and the empowerment of discounted voices and assets; and the
preservation and adaptation of time-tested historical knowledge, values and practices on one hand, and the
adoption of new technologies and acknowledgement of changing, unpredictable circumstances on the other. In
response to accelerating information-technological change, we might see Stewart Brand’s concept of the “long
now” (2008) as a call to rebalance on a collective societal scale what Daniel Kahneman has identified in
individuals as “fast” and “slow” thinking (2011). These needs and tensions are increased in societies and
communities currently undergoing rapid urbanization and development from positions of relative historical
material poverty, colonization and/or peripheralization – noting that this relativity is a matter of scale; positions
of advantage at one scale are often disadvantaged at another. In such contexts, political-economic positions
become outdated overnight, and various factors tend to compress the time horizons of decisions, eroding social
relations of trust and inhibiting the long-term incorporation of diverse forms of knowledge and the sustained
monitoring of effects (Lora-Wainwright 2014).

As a possible solution, social-ecological systems theory suggests that systems are resilient when they are: diverse
and heterogeneous; self-organized; and involve modularity and self-sufficiency at each scale as well as multiple
cross-scale interactions that function as feedback loops (Alberti 2013). Scale in this context refers to space, time
and social organization. Finding, measuring and accomplishing these features in a system is thus a supremely
complex and interdisciplinary exercise. Our paper reflects on this challenge through describing the work of a
loosely coordinated multidisciplinary group of faculty and students at the University of Washington (Seattle), Sichuan University (Chengdu), and other partner institutions engaged in urban planning, design, policy, anthropology, history, environmental science, and law in the Chengdu Plain of Sichuan Province, China. In key respects, Sichuan is a microcosm of China, and the Chengdu Plain, the nation’s largest irrigation district, has sustained over 2,000 years of history as probably the most productive per-hectare regional producer of grain in China. During the past decade, and likely for the first time in its history, urbanization has turned the Plain from a net grain exporter into a grain importer. Spatially, our work focuses on agricultural communities and households at Chengdu’s expanding periphery, but also extends to metropolitan governance and finance, regional watershed management, and national policies of urban development, food security and global trade. Topical foci range from the role of formal and informal property rights in access to land and urban space; shifts in the value of rural labor and products; the measurement of settlement form and cultural landscapes; and the growth and potential of critical and alternative grassroots rural development, food safety, and urban-rural mutual assistance movements, such as New Rural Reconstructionism. Methodologically, the work integrates quantitative analysis of social-ecological resilience with individual and collective participant observation and engagement in planning and policy development. Rather than report detailed findings from our investigations, the paper presents them in summary, and attempts to draw from them a framework for research on the interaction between biophysical realities and human agency, such that planning can more consciously strengthen feedback between long and short term, global and local, and personal and collective actions at multiple scales.

References

Abstract Index #: 395
HISTORY, POLICY AND POLITICS: ENVISIONING DELHI AS MORE HUMANE AND JUST "GLOBAL CITY"
Abstract System ID#: 1105
Individual Paper
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Cities in India, as in much of the developing world, are rapidly growing owing to a combination of forces unleashed by economic liberalization and globalization. Delhi, India’s capital city has nearly doubled in population in the last two decades alone. Every day, thousands of migrants from the villages and towns of north India come looking for work to the city. The majority of this migrant population lives in a variety of informal settlements dispersed throughout the metropolitan area, which can provide a launching pad and a sense of community. Many of these settlements, however, have insufficient urban infrastructure and sometimes lack even the most basic amenities of clean water and toilets. This paper reviews the history of Delhi’s attempts to deal with the issue of urban informality, from British colonial schemes, through the work of the Delhi Development Authority (DDA), and on to the more recent Master Plans. It seeks to understand how these approaches toward planning for the urban poor have evolved in the last six decades, and what their consequences have been.

Through a critical analysis of these schemes and policies, we argue that the prevailing approach to addressing urban informality continues to favour the interests of the city’s elites while neglecting the needs of the roughly four million people who live and work in such areas. Over the past five decades, there has been considerable advancement in planning scholarship on the topic of urban informality, some of which has been slowly integrated into the approaches used in Delhi, although more in theory and language than in practice. Nevertheless, the overall approach used by the relevant municipal and national bodies in Delhi continues to rely on outmoded approaches to urban planning that are inherently inequitable and unsustainable. We delve into the case of Kathputli Colony, a settlement of street performers and other groups to demonstrate the need for alternative
models of urban planning that prioritise social equity over real estate profitability, enabling Delhi to achieve its stated goal of becoming a healthy, humane and more socially just “global city”.

References


Abstract Index #: 396
INTERNATIONAL PLANNING “COURSE DEVELOPMENT ROUNDTABLE”
Abstract System ID#: 1108
Roundtable or Informal Discussion Session

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One of the most common challenges facing planning educators is “keeping current” in areas of planning where they teach but do not have an active research agenda. For example, a professor may conduct research primarily on housing, but teach her department’s core graduate course on international planning, which is necessarily broader in scope. The annual meeting of the ACSP is an ideal venue for planning educators to meet with colleagues who teach similar core courses and to share their recommendations for research and pedagogical tools in their subfields of planning.

We propose to create a new type of ACSP session, which we call a “Course Development Roundtable.” The basic concept is to invite a group of 10 scholars, each active in a different area of research or practice that is commonly taught in a core graduate course. This year, we will convene an “International Planning Course Development Roundtable” that will feature ten scholars who specialize in such areas as housing, economic development, informality, urban poverty, water and sanitation, climate change planning, natural hazard mitigation, etc.

Each scholar would prepare four pieces of information ahead of the roundtable:

1. One suggestion for a ‘classic’ reading in their area with a short justification for why it should be included on a contemporary syllabus. A ‘classic’ reading is one of those key pieces that were provocative or even paradigm changing for their time, or pieces many people totally disagree with today, but which set the stage for later scholarship and debates;
2. One suggestion for an ‘overview’ reading or case study, with a short explanation of why it is effective. An ‘overview’ reading is one that review the state of knowledge in the field, and very often might be a literature review or case study with terrific grounding in the literature. These readings are helpful for showing where the current state of knowledge is, where the gaps are, and where the field might be heading.
3. One suggestion for a ‘cutting edge’ reading that represents the best new work in their field in the past year, and a justification for why it is fresh or exciting;
4. One assignment, in-class exercise, or other activity that they have used effectively to teach their specialization, with a short description of why it has proved effective in the classroom.
At the ACSP meeting, the roundtable will proceed in a modified “PechaKucha” style. To keep the session on-time and within the designated time slot, each presenter will be given five slides to summarize the above pieces of information (one title slide + one slide for each piece of info). The slides automatically advance, forcing the presenter to quickly succinctly describe their reading choices and associated pedagogical tool.

The roundtable organizers will be responsible for identifying presenters, providing a slide template for the “PechaKucha” presentation, assembling the presentations ahead of the roundtable, moderating the session, and making the slides available to the broader planning community post-conference.

Abstract Index #: 397
URBAN INFORMALITY & INSTITUTIONALISM IN ENVIRONMENTAL PLANNING (REVIVING DELHI'S OPEN DRAIN-RIVER ECOSYSTEM BY PROVIDING WASTE MANAGEMENT IN INFORMAL SETTLEMENTS)
Abstract System ID#: 1133
Individual Paper

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CONTEXT
The stretch of the Yamuna river in Delhi, India, has been declared "dead" and unfit for all purposes except navigation, which is impossible given the river narrowing considerably. Severe pollution due to wastewater discharged by improper agricultural runoff, industrial discharge, and faulty sewage treatment plants (STPs) is the culprit. Millions have gone into river cleanup over 2 decades, but the problem cannot be effectively dealt with by just setting up STPs and pipelines that will not provide access to jhuggis (informal settlements). Absence of wastewater cleanup, solid waste management, and latrines predisposes jhuggi inhabitants to polluting behavior. This study aims to understand how the jhuggis contribute to drain and river pollution, and what kind of an intervention could prevent this.

Since providing these services in the haphazard building typology of jhuggis is challenging, the state prefers to displace them from the lands they occupy, nullah(open drain)-adjacent or otherwise. Jhuggi inhabitants are provided with alternate accommodation at the city periphery, far away from the many jobs they have to take on in order to support their families. But because they drive the politics and economy of the city by providing vote banks and cheap labour, there have been more threats than actual evictions. There is no comprehensive legislative or judicial strategy to deal with jhuggis occupying land along nullahs, and resuscitating the nullah-river ecosystem is exigent, so an intervention factoring in the jhuggis is needed now.

METHODOLOGY
Over June-July 2014, I collected drain water samples at some nullah-adjacent jhuggis (upstream, along, and downstream of the jhuggi), testing for phosphorus, ammonia nitrogen, suspended solids, BOD, COD, fecal coliforms. I conducted semi-structured interviews with jhuggi inhabitants to understand their water use dynamics, disposal habits, quantities of water used, quantities of solid waste generated, sanitation options, regularity of municipal services, frequency of flooding in nullahs, and reasons for flooding. This data reveals the urgency of the need for sanitation and waste management at jhuggis to prevent further pollution of the nullah-river ecosystem.

RESULTS
Most parameters cross wastewater discharge standards upstream of the jhuggis itself. So overall, jhuggis don’t pollute the drains as much as industry, faulty STPs, or agricultural runoff, but most parameters are expected to spike downstream of the jhuggis because they cannot dispose of their wastewater and solid waste anywhere other than the nullahs.

Waste management is needed to prevent further pollution; constructed wetlands and bioremediation for on-site wastewater treatment can reduce existing pollution. Given the challenging building typology of jhuggis, and the variations between sites, an adaptable, scalable intervention design is necessary. Also, given uncertainties
surrounding which jhuggis remain at their current locations in the future, an intervention design with alternate end-use is necessary. Lastly, given budget crunches, any additional infrastructure to be planned for and maintained must involve low capital and maintenance costs. Constructed wetlands and bioremediation fulfil these criteria.

SIGNIFICANCE
Pilot testing can provide necessary empirical evidence, and this study uses GIS, secondary data, and primary data (water quality, water use-discharge dynamics) to (1) understand jhuggis' contribution to nullah-river pollution, and (2) prepare a design proposal for identified pilot sites.

This study emphasizes the urgency of discussing informality and institutions simultaneously to address city and region-scale environmental issues, by establishing the roles of (1) informality, in exacerbating pollution, and (2) institutions, in predisposing jhuggis to this polluting behaviour.

References

Abstract Index #: 398
TOWARDS SUSTAINABLE AND SOCIALLY JUST URBAN WATER GOVERNANCE IN THE GLOBAL SOUTH: AN APPROACH TO INTEGRATING LOCAL KNOWLEDGE
Abstract System ID#: 1146
Individual Paper
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This paper presents initial results from a pilot project in Nigeria that seeks to combine local experiences with water governance, environmental concerns and access with data on land cover change to support community members, service providers and local government with relevant information for sustainable urban water governance. The project is a collaboration with non-governmental organizations part of NEWSAN, a network of local NGOs seeking to end water poverty in the country. Working with residents, stakeholders and officials, jointly defined indicators are incorporated into an open source mobile application, allowing immediate collection of geocoded data on pricing, quality, equity, gender differences in access, water sources and institutional actors, problems or satisfaction, complaint mechanisms, availability of alternatives, and environmental conditions. This data is compared to newly available 10-year high resolution remote sensing imagery classified at 30 meter resolution allowing for interpretation of the environmental impacts and challenges in implementing the human right to water in fast growing cities with minimal infrastructure. Such cities are highly dependent on informal and small scale providers, and community water systems, legal and illegal, that operate in tandem to official utilities and piped infrastructure (Kjellén & McGranahan, 2006; Spencer, 2008). There is an urgent need to incorporate the informal and small scale providers into broader analyses of urban water governance, the processes that allow urban stakeholders to “articulate their interests...legal rights...and mediate their differences” (Bakker et al 2008, p. 1894).

Sustainable water management requires an integrated approach that combines the social construction of water scarcity with the biophysical complexity of surface and groundwater systems (Showers, 2002). Such an approach could be used to prioritize the knowledge and demands of the poor and marginalized, putting their information,
realities and concerns at the core of models on sustainability and water sector reform. In the literature, a growing number of studies use remote sensing data to analyze urban development and the demand for services. Findings from this literature have identified more complex patterns of urbanization that reveal more than statistics can (Potts 2009), and have helped to massively scale the identification of areas in slum conditions to speed up the targeting of interventions where data is extremely limited. Globally, however, the issue of transparency of data from the state has been identified as a major barrier to better governance, correlated with better access to water. In Nigeria and many other countries, this problem is compounded by a lack of publicly accessible and usable data. Findings in this paper assess how new forms of data can support the practical implementation of the right to water. By working with communities in Nigeria (with an emphasis on individuals and households living in poverty or experiencing other forms of marginalization, e.g. tenure insecurity or gender discrimination), we can document local knowledge of hybrid arrangements in the water sector, the ability of citizens and interest groups to negotiate varied interests and demands, and the social and environmental impacts of inadequate water provision and wastewater management in urban and peri-urban areas.

References

Abstract Index #: 399
THE ORGANIZATIONAL DYNAMICS OF POST-DISASTER RUBBLE CLEARANCE: PLANNING LESSONS FROM PORT-AU-PRINCE, HAITI
Abstract System ID#: 1149
Individual Paper
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In the face of rapid urbanization, cities are increasingly at risk from major disasters (Swiss Re, 2013). As a result, governments are more frequently finding themselves responsible for the task of rubble clearance after disaster. While considerable attention has been given to other aspects of disasters – including immediate response, short-term shelter provision, and long-term housing – less attention has been dedicated to the issue of rubble and its management. The relative lack of research on this topic is surprising since the management of disaster-produced waste has been recognized as a major challenge in a variety of geographic contexts (Pilapitiya et al., 2006; Karunasena et al., 2009). It is also surprising given the scale of the problem. Brown et al. (2011) record ranges of waste produced following disasters ranging from 15 million tonnes following the 1995 Kobe earthquake to an estimated 23-60 million tonnes following the 2010 Haiti earthquake. One area that has been particularly understudied with respect to rubble is the organization of its management and disposal. In their review of the literature on post-disaster waste management, Brown et al. (2011: 1095) state: “There has been no integrated research on the types of organizational models used for waste management project implementation”. Understanding how organizations approach post-disaster rubble clearance is all the more important in a context where the number and variety of organizational actors engaged in humanitarian response is rapidly increasing (Stirrat, 2006).
This paper studies the organizational dynamics associated with the clearance of urban rubble through the lens of Port-au-Prince, Haiti. It begins by investigating the context for rubble clearance, including an examination of organizational approaches adopted in other disasters. It then analyzes detailed interviews with 52 organizations engaged in post-disaster response and reconstruction in Port-au-Prince. The interviews provide a window onto how these different organizations perceived and addressed the challenge of rubble clearance. The results reveal a tension between the organizations viewed as bearing primary responsibility for rubble clearance and those that ultimately undertook this task. A majority of respondents (66%) argued that Haitian government agencies should be in charge of rubble clearance. The actual pattern of rubble clearance was far different, however, with the government reporting the second lowest proportion of interviewed organizations engaged in rubble clearance. Rather, it was Haitian NGOs, intergovernmental organizations, bilateral development agencies and private contractors that reported greatest involvement in rubble clearance. Of the organizations that provided a reason for why they ultimately engaged in rubble clearance, all but one cited that “it was a hurdle to other work.” This indirect motivation for engaging in rubble clearance may explain the initially slow pace of clearance following the disaster. The results suggest that greater pre-disaster planning for rubble clearance is essential, particularly in settings like Port-au-Prince where the resources of the organizations expected to deliver on rubble clearance, most notably government, are limited. The paper concludes with a number of strategies for improving the inter-organizational planning and coordination of rubble clearance.

References


Abstract Index #: 400
DECENT WORK AND SOCIAL PROTECTION IN BELO HORIZONTE, BRAZIL
Abstract System ID#: 1179
Individual Paper

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Conditional cash transfer programs (CCTs) are common strategies for social protection worldwide. One of the largest is Brazil’s Bolsa Familia (BF) program, which reaches millions of households (Fiszbein et al 2009). BF provides direct cash transfer to poor families who agree to keep their children in school. However, BF does not directly help adult recipients find and engage in decent work – work that is safe, inclusive, and respects basic human rights (ILO 2012). ILO has a specific agenda for decent work that is based on four strategic objectives: creating jobs, guaranteeing rights at work, extending social protection, and social dialogue. The ILO’s definition for extending social protection is: “to promote both inclusion and productivity by ensuring that women and men enjoy working conditions that are safe, allow adequate free time and rest, take into account family and social values, provide for adequate compensation in case of lost or reduced income and permit access to adequate healthcare” (ILO, 2012). Since finding and maintaining decent work is a critical step towards eradicating poverty, it is important to understand how BF beneficiaries interact with the labor market and pursue decent work.

This paper will qualitatively investigate the relationships between BF, employment opportunities, and decent work in the municipality of Belo Horizonte (BH), the capital of the Brazilian state Minas Gerais. The primary goal of the paper is to assess how BF beneficiaries are engaging in decent work. This will be accomplished by surveying BF recipients with two objectives in mind: 1) Determine how BF beneficiaries find and engage in employment
opportunities; and 2) Evaluate whether BF beneficiaries have access to decent work. The BF survey will be designed to answer the following: 1) What types of income generating work, besides domestic work, are adult beneficiaries engaged in? 2) What kinds of working conditions do beneficiaries deal with? 3) What issues related to free time and rest, compensation, and healthcare do these adults face? 4) What is the spectrum of work opportunities that are available to adult beneficiaries? And 5) What types of complementary employment programs are available to BF recipients, and how do they utilize them? A total of 650 adults will be surveyed.

An understanding of how CCTs beneficiaries interact with social protection issues in the labor market is particularly important for the design of poverty alleviation policies and programs. However, little work has been done to understand this issue. Machado et al (2011) quantitatively assessed the implications of BF for the decent work agenda, and reported various positive findings such as diminishing unemployment and higher wages. Despite this, Machado et al (2011) points out that “there is room for improvement as regards the design and implementation of complementary programmes aimed at promoting job and income generating opportunities for beneficiaries.” The outcomes of this research will help inform policy making to ensure BF is functioning as a holistic and effective poverty alleviation strategy.

References

Abstract Index #: 401
BUILDING CLIMATE RESISTANT SPACES IN THE INFORMAL SETTLEMENTS OF SOUTHEAST ASIA
Abstract System ID#: 1236
Individual Paper

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Scholars identify a number of reasons why governments in Southeast Asia have been unsuccessful at planning for climate change impacts. These include poor coordination, lack of monitoring and evaluation, rigidity, lack of transparency, corruption, and processes through which well-connected individuals (elites) can dominate community-level planning and governance (Lebel et al. 2011; Manuta et al. 2006; Dasgupta and Beard 2007). At the same time it is clear that governments cannot be expected to independently solve the challenges of adaptation for the region’s urban poor. The challenge lies in how governance actors and institutions can improve adaptive capacities to deal with climate change (Lebel et al. 2011). In urban areas, which are characterised by a diversity of ethnicity, class, and interest, supporting social justice through collective adaptation means that actions must be framed in terms of rights and governance. The ways in which urban actors can create new mechanisms of collective decision-making, engagement, and linkages to formal state institutions, remains a pressing research concern. This paper explores initial efforts to engage traditionally excluded stakeholders from decision-making around planning for climate change impacts through Shared Learning Dialogues (as described by Tyler and Moench 2012) and participatory climate data collection in secondary schools in several communities in Thailand and Vietnam. This research is part of the Urban Climate Change Resilience in Southeast Asia Partnership (UCRSEA) that is funded by IDRC and SSHRC (Canada). We will rely on primary data collection using surveys and focus groups as well as extensive observation in the cities in which are research project is based (including Chiang Rai and Udon Thani, Thailand and Lao Cai and Ninh Binh, Vietnam).

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Investigating social change is a long-term and often elusive endeavour, particularly in a post-disaster context in a country of the ‘outer periphery’ of the world economic system (Fatton 2014). Five years after the earthquake in Haiti, which left more than 220,000 people dead, 1.5 million homeless, and which destroyed most buildings of central government and thousands of schools, hospitals, and local institutions, the situation remains dire. Reconstruction has been slow and most Haitians continue to struggle with daily survival. What can be done? According to many, reconstruction efforts can only succeed through improved collaborations with Haiti’s complex and resilient social institutions. Likewise, broader international development discourses recognize the importance of locally-based ‘people-centered’ approaches, ‘participatory development’ and ‘agency’. However, social institutions in Haiti have substantially eluded conventional strategies of international development, which often reveal only superficially the macro numbers of development tendencies. Qualitative analyses that investigate community development in a context-specific and distinctly human way are lacking. Such analyses are needed in order to reveal patterns of social change in communities.

In my doctoral thesis, I investigate NGO-community development collaborations and seek to expose in what ways they may be contributing (or not) to social change. The principal community of this study is Bellevue-Lamontagne, Haiti where collaborative community development efforts began in the year following the earthquake when local residents and NGOs discussed strategies for rebuilding their area which had been hit hard by the quake. Through participatory practices, the community decided on an education-centered approach to community development that incorporates social enterprise, sustainability initiatives, community health, and democratic decision-making practices.

My methodology combines case study, participatory approaches, and narrative analysis. This strategy attempts to give ‘voice’ to communities in their struggles to overcome the main barriers to realizing change, including how relationships of power shape community development and decision-making processes. Consistent with phronesis research (as in Flyvbjerg 2001), my strategy of inquiry focuses on combining both actor and structural levels of analysis -- understanding from within and from outside. I use methods of participatory photography, participatory mapping, community walks, probe-based and household interviews, focus groups, and video interviews. This research methodology has as its lens participatory and transformative theories that are value-laden by social justice, sustainability, participation, and an ideology of equality (Freire, 1972 and Ledwith, 2011).

Early findings reveal that 1) Participants tend to value community over individual wellbeing, and despite challenges of everyday survival, people take a long view and hope for a better future for their children; 2) People feel that their voices have been heard and that they have contributed to shaping community development decisions; 3) People do not expect the state to act in their interests (such as by providing police protection or assistance to reconstruct their homes). They expect that positive change can only come about through their working together with others in the community more effectively and, to a lesser extent, with assistance from international organizations.

In order to continue learning from people’s lived experiences over time, I have designed this study to enable qualitative longitudinal research. With this I aim to expose dynamics of social change over the years that will
track conditions, perceptions, and outcomes of participants, their families and local communities. I hope to contribute to improved community development policy, research, and practice in Haiti and broader structural transformation where citizens’ voices are heard and communities are empowered to realize their aspirations for change.

Video with early research findings: vimeo.com/jayneew

References


Abstract Index #: 403

URBAN GOVERNANCE IN LATIN AMERICAN HISTORIC CENTERS: CONSERVATION, POVERTY REDUCTION AND DISPLACEMENT

Abstract System ID#: 1270

Individual Paper

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This paper presents research dissertation research that focuses on the interactions between urban heritage conservation, poverty reduction and displacement. The majority of existing scholarship focuses on these three themes as separate phenomena that require distinct policy responses and mitigation strategies. By applying a mixed-methods approach to four case studies in Ecuador – Quito, Ibarra, Loja and Cuenca – this research identifies the conditions or factors that foster both synergy and disharmony among these three areas of practice. Analysis focuses on the institutional arrangements that shape the past and present social, economic and spatial configurations of these historic centers, while paying close attention to the way that heritage is configured and applied in urban governance.

Results from these four cities are assessed against a model of successful conservation-based regeneration (CBR), defined as a process and outcome combining good physical conservation with poverty reduction. Successful CBR depends on public, private and civic institutions that foster good conservation, economic development – measured by economic impacts – and regeneration politics that encourage displacement mitigation. This model prioritizes the values and retention of existing residents by retaining regeneration benefits within local, usually low-income, communities.

The four cities in Ecuador represent variation in city size, historic fabric, conservation approach, poverty levels and policy proscriptions. In all cities, government is the primary, if not only, actor involved in guiding the historic centers with limited, and sometimes nonexistent, citizen involvement. However, the degree of private sector interest and government-permitted involvement in the historic centers varies amongst the cities, playing a central role in their current architectural, social and economic conditions. In all cities, existing policies heavily favor commercial activity over residential occupation, resulting in residential abandonment and stifling long-term conservation efforts and quality of life improvements. Further, all cities lack, to varying degrees, the necessary political will and capacity and engagement from the public, private and civic sectors to create and enforce policy tools and financial incentives to promote conservation and poverty reduction for existing local communities. This is a result of: 1) an imbalanced decentralization process that ceded authority and responsibility to municipalities but failed to facilitate their ability to generate self-sustaining funds; 2) short-term visioning for historic centers that prioritizes political support and election cycles over long-term, sustainable, outcomes; 3) the recent discouragement of citizen engagement; and 4) the conceptualization and application of antiquated conservation principles that assign values to individual buildings, rather than the urban context, that are based on purely architectural terms.
Despite these commonalities, the way in which conservation, poverty reduction and displacement interact in each city remains distinct. Using qualitative interviews of key public, private and nonprofit officials, architectural surveys, policy analysis and quantitative assessment of census and housing data and the Multidimensional Poverty Index to include non-monetary components of poverty, this paper presents a theoretical model of how institutions can better direct conservation interventions that can contribute to poverty reduction and improved quality of life for existing residents. This includes identifying and crafting effective policy and financial tools within urban regeneration programs to better redirect conservation’s benefits to existing low-income communities, such as public-private partnerships, grant and taxation programs, workforce development curriculums and others. These findings have wide applicability beyond Ecuador, extending to many governments in the Global South and Global North that are faced with concentrations and colocations of historic buildings and poverty, and the challenge of balancing urban heritage conservation with development pressures.

References


Abstract Index #: 404

SHRINKING CITIES AND RESOURCE-BASED ECONOMY IN CHINA

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With an average annual GDP growth rate of over eight percent in the past 15 years, Chinese cities are growing at a phenomenal pace. However, not every city in this economic agglomerate is expanding; some Chinese cities have stagnant or even negative population growth. Whilst the phenomenon of shrinkage in general may be attributable to exogenous factors such as globalization and hence the loss of competitiveness in the global economy, urban shrinkage may also stem from internal factors such as industrial cycle, which is critical to resource-based cities given the possibility of natural resource exhaustion. Accounting for 17% of all cities in China, resource-based cities have played a crucial role in China’s economic development. However, these cities have also accumulated many pressing problems such as resource depletion, unbalanced industry structure, economic downturn, unemployment, and environmental pollution. In an attempt to understand shrinking cities in China and to enlighten the design of sustainable development policies for our future cities, this study will focus on the population growth/decline in China’s resource-based cities, review the national and local economic development policies, and report two case studies of Daqing City and Xinyu City, respectively.

References

FINANCIALIZED URBAN POLICY AND ITS EFFECT ON SPACE AND PLACE: THE CASE OF SAO PAULO’S CASA PAULISTA PROGRAM

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For the last two decades, development policy in Brazil has been driven by a neoliberal approach and included financial liberalization, market deregulation and a greater dependence on private capital for infrastructure development and public services’ provision (Paulani 2008, Royer 2009, Fix 2011). In the urban sector, policies and programs have put a great focus on property development and on the creation of new forms of institutional environments that rely on greater private sector participation and on more complex finance schemes (Rufino 2013). Simultaneously, these development initiatives have not addressed the needs of the most socially and economic vulnerable groups.

This paper is based on the proposition that the financialization of housing policy and the real estate sector in Brazil are outcomes of the country’s adoption of a neoliberal approach towards development (Royer 2009, Fix 2011). The financialization of urban policy, which is characterized by the integration of property and financial markets, has imposed a new logic on housing and real estate development decisions, marked by the prevalence of exchange values prevail over use values and the growing importance of the financial market in its relationship with the property market (Fix 2011).

Through a case study of a state level housing and urban regeneration program (the Casa Paulista program) financed though a public private partnership (PPP), this paper seeks to understand how does the adoption of financialized housing and real estate development policy affects spatial and social transformations in the downtown area of Brazil’s financial capital, São Paulo city. Specifically, this paper inquires: first, how does the adoption of financialized housing and real estate policy affects spatial transformation in São Paulo’s downtown area, and; second, how does the public sector, the private markets and social actors interact with and respond to such financialized urban policy.

This investigation will rely on a case study analysis (Burawoy 1998, George and Bennett 2005, Yin 2014) of a the Casa Paulista PPP. The study will be based on content analysis of field data originated from participant observation at public meetings and in-depth interviews with representatives of Casa Paulista’s interest groups (i.e., state and municipal level public officials, real estate sector representatives, members of the local community and representatives of the organized pro affordable housing movement), as well secondary data such as national, state and municipal-level legislation concerning the PPP, project documents, and journal and media articles.

This study will contribute to understanding how financialization of urban policy shapes downtown regions of emerging global cities such as São Paulo. The analysis developed here sheds light onto the possible impacts of financialization on outcomes such as access to adequate housing, city services, and economic opportunities for different social groups. Moreover, this research will expand knowledge about how financialization both responds to and recreates uneven development in urban settings.

References

Many nations in the world are facing challenges in restoring economic growth. Each government designs and implements various stimulus programs to facilitate the regional economic development. In doing so, the role of central government in the formulation and management of local and economic development policies has been a critical issue in the planning field. Particularly, in the economic hard times, national governments of various political hues are seeking actively to intervene in the local and regional development.

Economic development programs have been an important tool for local and rural development in Korea like any other countries. Korean government spends a large portion of budget (around 10% in 2008) for community and regional development programs. However, it is noted that the development programs of the central government that impact the regional level are highly fragmented, and that there is no clear mechanism to coordinate various regional programs and initiatives at the local and regional level. The present multiplicity of programs and the fragmentation of implementation system impose unnecessarily high transaction costs on various government agencies and cause considerable inefficiency.

Considering the cross-cutting issues of regional competitiveness, therefore, there is a critical need to develop a coordinated development approach. It involves the vertical and horizontal coordination of different levels of government, and local public/private actors.

This study analyzes the governance system of regional economic development in Korea. The aim of this study is to investigate the factors that cause fragmentation, program overlap, ineffective allocation of public finance, and barriers to interagency coordination. This work analyzes the institutional aspect as well as implementation process and behavioral factors. Particular attention is given to the way in which many government programs and initiatives for regional development are implemented, and the current situation that is not able to properly deal with cross-cutting regional issues. This work also attempts to propose an effective place-based system for integrated regional development.

The research method of the study includes focus group, survey, field notes, structured and unstructured interviews, analysis of documents and materials, consultation with local and central government officials. The interview with those who are responsible for implementing regional programs at the local and regional level is particularly important to analyze the implementation process and behavioral factors. This study also collects information from the policy professionals, local experts and stakeholders who are engaged in the provision of regional development programs. Surveys are conducted to analyze the problems of implementing regional development programs. By doing so, the researcher can gain a closer insight into the practices of policy process.

This study contributes to the knowledge of governance and intergovernmental relations in regional economic development policy. The study also provides policy implications for more effective delivery of government services to meet the local and regional needs. The critical issues raised here are how central government relates
with other institutions at the regional and local level, and how it ensures integration between the organizations that are responsible for different programs at the local and regional level. This study proposes the role of central government to provide mechanisms to coordinate and integrate government programs and policies that are implemented locally. Individual departments of the central government are able to use integrated structure to deliver their community and economic development programs more effectively and efficiently.

References


Abstract Index #: 407
THE CONFLATION OF PARTICIPATORY BUDGETING AND PUBLIC-PRIVATE PARTNERSHIPS IN PORTO ALEGRE, BRAZIL: THE CONSTRUCTION OF A WORKING-CLASS MALL FOR STREET HAWKERS
Abstract System ID#: 1346
Individual Paper

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How vulnerable are participatory institutions to partisan politics and market forces? What are the circumstances under which the redistributive achievements of counterhegemonic forms of urbanization and globalization, such as the Participatory Budget (PB) of Porto Alegre, are reversible? This paper addresses the political transition of Porto Alegre’s PB from a mechanism of restraining and managing some of the harshest manifestations of neoliberal urbanization to a promoter of profit-driven urban development. The most emblematic instance of the transition is the public–private partnership for the construction and management by a developer of a marketplace to relocate downtown street hawkers to an enclosed building. Neoliberal restructuring projects have produced uneven and heterogeneous patterns of development that significantly affect the political economy of cities, nations, and world regions (Brenner et al., 2010). Public–private partnerships represent the cornerstone of neoliberal urban governance (Hackworth, 2007, p. 61) because they characterize the changing role of municipal governments in post-Fordist capitalism: from managers in the delivery of public works and services to entrepreneurs who effectively seize opportunities for urban economic development (Harvey, 1989, p. 7). Public–private partnerships are not exclusively focused on the practices of gentrification and segregation, their efforts now include mechanisms to profit from informal housing and labor, such as the examples of the construction of enclosed market places for street sellers demonstrate. This paper also demonstrates how neoliberal programs of public–private partnerships undermine more redistributive participatory practices, such as the PB, by combining their mechanisms with the older practices rather than eliminating the rival planning tool. The path of the Camelódromo project from public–private partnership to the PB reveal not the perverse confluence of leftist and neoliberal participatory projects, as some scholars argue (e.g., Dagnino, 2003, p. 7), but the strategic co-optation of the former by the latter. Porto Alegre’s right-wing political parties did not have a vision of participatory democracy to start with and then later embraced the leftist participatory project. Instead, center-right politicians in Porto Alegre were politically forced to envision a strategy of participatory planning that could incorporate, or at least manage and contain, the outcomes of municipal socialism through popular participation characteristic of the PB. I argue that social classes with an investment in the urban question are key actors in developing hybrid models of neoliberal urbanization. This paper is based on my dissertation fieldwork, which took place from July 2009 through March 2011. Methods included participant observation of PB meetings, archival research of PB meeting minutes, transcriptions of meetings for the past 15 years, interviews with then current delegates and councilors and a survey of PB representatives. I also visited the Camelódromo on several occasions to chat, shop, and observe commerce. This paper provides an analysis of local class interests and strategies regarding the issue of street hawking in Porto Alegre by contrasting models of participatory planning.
References


Abstract Index #: 408

THE EFFECTS OF BUS RAPID TRANSIT (BRT) SYSTEMS ON ACCESSIBILITY AND MOBILITY FOR THE POOR: TWO CASES FROM LATIN AMERICA

Abstract System ID#: 1353
Individual Paper

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Disparities in the distribution of costs and benefits of transportation systems contribute to and reinforce the already high levels of inequality in Latin America. In addition, low-income populations often bear the highest burdens related to negative transport externalities in cities, including longer travel times and higher exposure to pollution and risk of traffic accidents. While most mobility plans of major cities in Latin America include increasing social inclusion and equity as relevant objectives in the planning and development processes, the tools for the analysis and evaluation of transport projects and conditions do not measure, with either specific or solid indicators, their contribution to the accessibility levels to opportunities and their social implications, particularly for the most vulnerable segments of the population.

The Inter-American Development Bank (IDB) urban transport portfolio grown rapidly in recent years, from just 17% of the transport portfolio in the early 2000’s (2000-2004) to 33% in more recently (2009 to 2013) —with roughly half of the mass transit projects devoted to Bus Rapid Transit (BRT) systems. Many of IDB funded urban transport projects include improving mobility conditions and access to employment and service centers as an objective. However, to what extent the access and mobility objectives for low income populations are being met is unknown. Further, to date, there is little analysis of how well IDB urban transport projects are designed to meet these objectives or the extent to which the indicators established prior to project execution are relevant.

Using stated and revealed preference surveys we examine to what extent two completed IDB supported BRT projects in the cities of Cali, Colombia, and Lima, Peru, have improved mobility conditions and access to employment and services centers for low-income populations. Although the projects had explicit objectives of improving mobility for the poor, aside from placing the corridors and/or feeders in or near low-income or poor neighborhoods, we find that little or no diagnosis of the mobility needs of the poor was conducted to inform the projects’ design. Moreover, the projects’ planned elimination of the traditional bus services that operated often times informally and reached far into poor neighborhoods, presented a risk in terms of possible unintended reductions in access to public transit for the poor, particularly in light of the absence of detailed analyses of the needs of poor populations and major reforms to bus route structuring.

While the poor ride in the BRT systems, they do so at lower rates compared to the traditional bus systems and compared to non-poor residents. The BRT systems decrease travel times substantially, particularly for longer trips. However, poor service quality, particularly in peripheral areas where the low-income populations are concentrated have reduced usage relative to traditional transit modes. In addition, gaps in coverage and integration, as well affordability are barriers for the poor in both cities. Increased coverage of services through feeders and fare integration with informal modes could improve outcomes. Finally, targeted subsidies for the poor could improve accessibility.
Justice and The City: (re)Examining the Past to Create the Future
55th Annual ACSP Conference

References


Abstract Index #: 409

INTERNATIONAL PLANNING: LESSONS FOR NORTH AMERICAN PRACTICE, THEORY, AND PEDAGOGY

Abstract System ID#: 1374
Roundtable or Informal Discussion Session

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What does international planning hold for lessons in North American practice, theory, and pedagogy? Traditionally, planning ideas have been studied as a diffusion from North to South, wherein planning ideas from developed countries are adopted in developing countries. However, there are a range of planning ideas that have been adopted on the reverse, that is, from the South to the North. This roundtable will explore the range of planning ideas that migrate from the South to North, and the implications that the diffusion has for North American planning. Planning scholars have not paid much attention to the reverse diffusion. There are several examples of such diffusion. From Brazil, the public transportation policies and participatory budgeting processes have been adopted in urban transit policies and budgeting processes respectively in North America. The Colombian example of Cyclovia and pedestrian orientation have been adopted by several American cities. The collective lending policies and micro-entrepreneurship of Grameen Bank in Bangladesh has been adopted across many developing countries as well as by community development banks in the United States. Some innovations in the developing countries are not yet on the radar screen of American cities. The mobile phone payments of M-Pesa that emerged in Kenya and has transformed payment processes across many African countries have not yet emerged in the United States. Alternative private mechanisms to public provision of transit has not emerged in North American cities, which is common-place with private licensed bus operators in developing countries; almost all public transit in American cities is still publicly owned. In the context of diffusion (and no diffusion) of certain planning practices from the developing world to the United States, this panel will explore the following sub-questions:

a. What are the range of planning practices that have diffused from the South to the North? In responding to this question, we will highlight and document the specific examples that have been adopted (and not adopted) from the South. We will explore the factors that enabled (and hindered) the diffusion and the specific ways by which the practice was contextualized to the local planning conditions.

b. How does the diffusion from the South to the North affect the planning theory? We will explore the theoretical re-framing of planning processes in answering this question. Planning theory principles are mainly North American centered, in which the spatial differentiation and zoning are based on functional and formal processes. We will explore how there is increasing recognition of the large scale of informal processes and the informal city, but have not been recognized in the planning theory discourse.

c. How does the diffusion inform planning pedagogy? We have come to recognize the importance of international planning, but much of this pedagogy is centered on a North American lens of how Third World Cities are viewed. Such pedagogy has implied that the planning students will have exposure to practices in the South. However, these courses have rarely dwelt on how the practices in the South are
being adopted in the North. In exploring this question, we will explore specific ways in which we could
enrich the international planning classes to include an element of the reverse diffusion process.

This will be a roundtable which will be sponsored by the Global Planning Educators Interest Group (GPEIG). The
roundtable will bring together the international planning scholars specializing in different regions to explore the
above three questions from those regional perspectives. Tentatively, the planning scholars will include: Gabriella
Carolini (MIT), who will bring the Latin American and African perspective on international diffusion; Joseli
Macedo (University of Florida), who will bring the Brazilian (and Indian) perspectives. Sukumar Ganapati (FIU) will
lead the roundtable with an overview and key questions.

Track 7: Land Use Policy and Governance

Abstract Index #: 410

URBANIZATION AND LOSS OF AGRICULTURAL LAND: A CASE STUDY OF MADISON COUNTY, ALABAMA, 1970-
2010. TESHOME GABRE, PHD AND CONSTANCE WILSON, PHD, DEPARTMENT OF COMMUNITY AND REGIONAL
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Abstract System ID#: 65

Individual Paper

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Madison County is one of the fastest growing counties in the state of Alabama. As the county grows
demographically, socially and economically, its degree of urbanization has increased, at the cost of agricultural
land for urban development. The objective of this study is to assess the demographic and socioeconomic trends
of the County and measure the loss of agricultural land of Madison County between 1970 and 2010. The data for
this study were collected from the U.S. Census of Population and Housing 1970-1990, American Community
Survey 2010, County and City Data Book 1988 and 1994, County Data Book 2003, Geolytics Census CD ROM 1970-
2000, the Census of Agriculture 1974-2007. Satellite images of the study area were analyzed with Geographic
Information System to determine the extent of agricultural land loss, and measure land use and land cover
changes of the County. Also, the County’s farmers were surveyed to find their perception of the change. The
result of the study indicated that between 1970 and 2010, the City of Huntsville, the largest city in Madison
County has annexed more than 65,600 acres of farmland from Madison County. The County’s population has
increased by 80%, civilian labor force has increased by 147.8%, and housing stock by 149.8%. The survey analysis
also showed that 100% of the respondents believed that Madison County has lost its agricultural land to
urbanization in the last 10 years; and 92.9% of them indicated that the pressure to convert agricultural land to
urban use is faster than ever. Overall, the study showed that between 1974 and 2002, the number of farm
operators declined by 62.1% and 45.4% of the agricultural land of the County was lost to urbanization, while the
State of Alabama and the U.S. lost only 24.9% and 7.7% of their agricultural land, respectively. If this trend
continues, within the next 30 or 50 years, farming can be a thing of the past in Madison County, Alabama.

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AN INTEGRATED MODEL OF LAND USE PLANNING FOR ADAPTING TO CLIMATE CHANGE

Abstract Index #: 411
Abstract System ID#: 77
Individual Paper

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Land use plans are not merely a component of urban development policy, but rather have a causal role in shaping the future patterns of growth and risk in a community. The power of land use planning in mitigating risks from local natural hazards while promoting a better quality of life for the citizens is well documented in planning scholarship. However, in recent years traditional land use planning has been under attack by researchers for promoting unsustainable growth patterns that increase community exposure to risks from various natural hazards. While, a number of researchers have called for effective integration of hazard mitigation in the local hazard mitigation process, most communities continue to plan for growth and economic development even in the face of increasing risks from natural hazards. In the coming decades, these negative impacts of insensitive land use planning are likely to be further exacerbated by growing changes in the global climatic systems. There is irrefutable scientific evidence to suggest that we have entered a high-risk era of climatic changes that is only likely to worsen if the global greenhouse emissions are not controlled soon. A growing number of communities across the nation are experiencing unprecedented extreme weather conditions as a result of changes in the global climatic system. This risk from climate change is further exacerbated by traditional development patterns that continue to put more people and structures in areas likely to be at the greatest risk. Thus, while climatic change is slowly increasing vulnerability, insensitive development patterns are enhancing vulnerability much more quickly and at a larger magnitude. Given this scenario it is but imperative that traditional land use models be adapted to meet the changing realities of a changing climatic system.

This research article proposes an integrated model for Land Use Planning that is sensitive to local hazard mitigation, as well as anticipated changes in the climatic system. This model is based on the argument that land use planning is one of the strongest tools available to the local municipal governments for guiding future development in a manner that is accommodates changing climatic conditions and promotes local resilience to extreme natural hazard events. We argue that existing institutional mechanisms for implementing land use plans are the most appropriate and effective way of implementing climate change adaptation policies. At the same time, the traditional land use planning process is data intensive and lacks flexibility to deal with uncertainties associated with climate change. Further, the outcomes of traditional land use planning process are rigid with limited opportunity for flexibility in face of changing ground conditions.

This article follows a three-step methodology in development of the proposed model. First, we undertake a thematic analysis of traditional models of land use planning, hazard mitigation, and climate change adaptation. As part of this analysis we review each of the respective planning models to identify and organize distinctive components critical to successful plan development. We then, identify linkages and dependencies among the three planning models through pattern recognition. Thereafter, we validate our analysis through an empirical evaluation of each of these plans for fifteen communities. Finally based on our empirical findings, we propose an integrated model for Land Use planning.

References

The concentration of warehousing activities generates vehicle-related externalities including air pollution, noise, safety risks, and traffic congestion that affect surrounding neighborhoods. Existing literature on environmental justice has provided voluminous evidence on the co-location of locally undesirable land uses (LULUs) and disadvantaged people. However, few efforts have been made to link the warehousing location to environmental justice.

I ascribe the possible environmental injustice in the siting of warehouses to economic, political and institutional factors. First, operators tend to locate warehouses in neighborhoods with low land values and low-skilled labor pools to reduce the economic costs. Second, given the externalities associated with warehouses, operators may prefer to site them in the neighborhoods with the least political resistance, in most cases, those dominated by poor and minority people. Third, the path dependence of zoning spatially constrains the location choice of warehouses. These three factors are intertwined in the warehousing location process.

Using data of Los Angeles Metropolitan Area in 2009, this study tests the relationship between the distribution of warehouses and various location factors. Cross-sectional Poisson and Logistic models are estimated with explanatory variables, including median land value, poverty ratio, minority ratio, and intensities of relevant zoning types. Transportation accessibility, another important vector of location factors, is also included in the model. The results support the hypothesis that warehouses appear more frequently in the neighborhoods with lower land values. Nonetheless, warehouses are less likely located in neighborhoods with high poverty ratios. It implies a major difference between traditional LULUs and warehouses that warehouses store valuable goods and are more sensible of local security. Poor neighborhoods are less attractive due to safety risks. In addition, the relationships between minority dominance and warehousing location are mixed. The logistic facilities are apt to be concentrated in neighborhoods dominated by the Latinos, but not for other minority races. The results also suggest that zoning exerts great impacts on the location choice of warehouses. The neighborhoods with higher warehousing and manufacturing zoning densities and lower residential coverage are more likely to be the target locations for warehouses. Finally, among the variables measuring transportation accessibility, only transport network density plays a substantial role in the location choice of warehouses.

The study provides an overview of how warehousing location relies on the characteristics of local neighborhoods, and tests whether environmental injustice exists in the location choice of warehouses with empirical data. The overall finding suggests that warehousing location is more subject to economic location factors, such as land rent, transport costs and security risks, than the political benefits from environmental injustice. Meanwhile, the path dependence in the zoning process may further contribute to disproportionate environmental burden on the affected neighborhoods. This study provides policy makers and planners a caution of environmental injustice in warehousing location, which mainly derives from economic and institutional factors. More collaboration between governments and the warehousing sector would help mitigate the externalities associated with warehousing activities.

References
Managing urban growth has been one of the most important land use planning concerns for decades. Planners have invented and implemented various urban growth management tools such as Urban Growth Boundaries, Priority Funding Areas, and Greenbelts to control and manage urban growth in various parts of the world. Originating from the United Kingdom as a legacy of Sir Ebenezer Howard’s Garden City idea, the greenbelt is the oldest urban growth management tool that gained global popularity during the 20th century. Many national governments adapted the British ideas including Canada, Australia, South Korea, and the United States (Hack 2012; Amati and Taylor 2010; Daniels 2010).

My research evaluates the performance of the greenbelt in Seoul, South Korea to determine whether it has been an effective tool. Seoul’s greenbelt offers broad insights about the impacts of a strictly enforced, but modified greenbelt on such issues as housing affordability, urban form, environmental protection, the resolution of property disputes and other contemporary concerns.

In 1971, Korea instituted its 1,566 km2 (604.6 mi2) greenbelt surrounding Seoul. With this action, the government aimed to prevent sprawl, protect farmland and ecosystem services, and maintain military installations. The Korean government maintained this greenbelt for nearly 30 years. In the early 2000s, it relaxed the regulations, releasing a significant portion (about 10%) of greenbelt lands. The government succumbed to the escalating development pressures in the city and surrounding region and the intensifying opposition from land owners who sought to develop their lands, yet it did not give free rein to the private sector to develop all of the released land (Bae, Jun, and Richardson 2011; Bae and Jun 2003). In the late 2000s, the Korean government initiated mega-scale residential development projects on the released greenbelt lands to resolve the housing affordability problems (Korea Ministry of Land and Transport 2010).

This paper includes a performance evaluation of the greenbelt policy pre- and post-relaxation in order to determine the extent to which the Korean government has managed urban growth. Moreover, the evaluation provides useful implications for other countries that are considering whether to relax and develop greenbelt lands. For example, the British government is considering the construction of more than 150,000 homes on the greenbelt lands near Greater London to accommodate population growth and resolve housing problems (Watts 20:28). Another key objective of my research is identifying and testing alternative greenbelt models. Some metropolitan counties in the US have incorporated market-based land preservation programs and agricultural zoning to enhance the greenbelt program which has generated some positive outcomes such as more preserved farmland and higher agricultural productivity (Daniels 2010). I am hypothesizing that this American greenbelt model will contribute to resolving some challenges of the current greenbelt, and moreover balance the growth and land preservation in Korea.
The performance of the greenbelts is evaluated using four criteria adapted from the Ingram and Hong’s work on the evaluation of Smart Growth in America (Ingram and Hong 2009). The evaluation criteria include 1) physical growth containment, 2) transportation effects, 3) housing affordability, and 4) fiscal costs for community service provision. This paper uses both quantitative and qualitative methods to evaluate the performance of different greenbelt models. The modeling outcomes based on the four criteria are used compute the net costs associated with the different greenbelt models. The outcomes help to test the validity of the government’s decision to modify the greenbelt policy. This paper then recommends an alternative greenbelt model for better urban growth management in the Seoul Metropolitan Area.

References

Abstract Index #: 414
THE RULES OF RESIDENTIAL SEGREGATION: AMERICAN HOUSING TAXONOMIES AND THEIR PRECEDENTS
Abstract System ID#: 100
Individual Paper
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It has been argued for several decades that zoning, the most common instrument of municipal land-use control, was inspired by West European, especially German policy advances in the late 1800s and early 1900s (Toll 1969). But if this is the case, why is it that the most ubiquitous category used in American zoning ordinances, the single-family residential district, is so specifically American? As recent literature has shown, the single-family district is not widely used in Germany and other European countries (Hirt 2012). How and why did this US-European difference in municipal law-making emerge?

The current literature helps us address this question to a limited extent. This is because most of it has been limited to the domestic arena. Yet restricting studies to one’s own legal system may provide an incomplete picture of how legal concepts that have become habitual reached their seemingly preordained status. Cross-national juxtapositions, in contrast, help question the “normalcy” of domestic concepts: what is viewed as “normal” domestically may seem peculiar if considered comparatively. A comparative view also reveals some limits of the prevailing US explanations. Many explanations for the popularity of zoning make reference to health and safety. However, these do not help us much in understanding why single-family zones, specifically, acquired an elevated status in US planning. Whereas health and safety concerns may help us account for the separation of housing from polluting industry, it is hard to see how either would be necessarily advanced if people in individual homes are separated by law from those in multi-family housing. Furthermore, even if there were health and safety benefits, why didn’t they translate into legally mandated housing separation in West European countries, whose cities also experienced the acute health and safety threats brought about by the industrial revolution?

More sophisticated domestically grounded explanations focus on real-estate economics. At least two main streams of economic theory may be identified in relation to zoning: M. Weiss’s (1987) theory on the key role of the real-estate industry in pushing forward the zoning agenda, including the creation of pure single-family districts; and W. Fischel’s (2001) “homevoter hypothesis” on the key role of US homeowners in supporting single-
family zoning as means of protecting their largest financial asset, the home, from depreciation. Both make sense when we consider the key role played by real-estate interests in the early-20th-century American city and the fact that at the time, the United States was the leading “nation of homeowners.” But today, when European home-ownership rates are comparable to US ones, why are zoning-like tools mandating separation by housing type still largely absent from the European scene?

The paper explores two hypotheses for the particularity of US zoning, which are embedded in the early-20th-century US socio-cultural context: 1) that in a country with an unprecedented influx of low-class ethnic and racial “others,” the single- versus multi-family dichotomy reflected widely held views that race and class divisions must be codified in space, and 2) that pastoral ideals regarding the supremacy of single-family homes were an integral part of the American experience more so than they were in Europe. These arguments have been individually discussed in the literature on American zoning. The class and race argument has been advanced by many authors such as Christopher Silver (1997) and Raphael Fischler (1998). And pastoral ideals, especially the appeal of the single-family home, have been highlighted by Martha Lees (1994). However, these authors deal only with US zoning. In contrast, this paper explores the issue comparatively pointing to the contrasting ideological positions of early European and American experts regarding social mixing and the spatial position of the individual household in the community.

References

Abstract Index #: 415
LOCAL LAND USE PLANNING RESPONSES TO HYDRAULIC FRACTURING
Abstract System ID#: 101
Individual Paper

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Horizontal high volume hydraulic fracturing (fracking), in which a mixture of water, sand, and chemicals is pumped thousands of meters underground to extract natural gas in shale rock formations, has become an increasingly widespread and controversial method of extracting energy resources (Meyer 2012; Negro 2012; Nolon 2012; Boudet et al. 2014). While the long term costs and benefits of such activity are still a matter of debate, in the short term fracking has transformed localities across the country almost overnight as drilling and pipeline operations and their workers arrive in droves.

Because of environmental and land use concerns, many local governments have attempted to regulate fracking within their boundaries through zoning, placing them in conflict in some cases with state-level controls that would strip power from localities to regulate fracking and its impacts (Rabe 2012). The extent to which local governments may regulate fracking is highly variable by state and legally in flux (Wiseman 2014). Since many local governments may be unclear about the nature of the risk from fracking (oil and gas companies conducting fracking have proprietary control over disclosure of the chemicals they inject) (Mitka 2012), the range of local
policy changes to address fracking may vary significantly in size, scope, or effectiveness to the environmental hazards posed by fracking byproducts due to local differences in risk perception (Schafft et al. 2013). Indeed, many local governments report that they have attempted to regulate or otherwise affect fracking activity because they do not trust either the state and federal government or the oil and gas industry to adequately protect their localities from the potential environmental and fiscal costs of fracking (Christopherson et al. 2013).

In this study, we ask, what have been the most common policy responses to fracking in local zoning ordinances and comprehensive plans? Building on the work of Christopherson and colleagues, we expect that, unlike other technological hazards, fracking has high salience, focuses people’s attention and elicits a planning policy response. Moreover, as general ordinance approaches encounter legal limits on regulating fracking, we expect that local governments will turn to a land use-based approach to retain at least some control over this activity.

We investigate this research question and test our hypotheses with a survey conducted in early 2014 of all communities that are partially or totally located within shale basins in four states: Colorado, Louisiana, North Dakota, and Pennsylvania. These four states include considerable diversity in terms of experiences with gas and oil drilling, state-level policies on fracking, population density, and natural features. This paper will present the results of the survey.

References


Abstract Index #: 416
THE HIGH COST OF BUNDLED PARKING: PARKING AND URBAN RESIDENTIAL RENTS IN THE UNITED STATES

Abstract System ID#: 106
Individual Paper

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Parking requirements are a centerpiece of American land use regulation, and reforming these standards is of interest to many policymakers. Bundled parking refers to parking spaces that are rented or sold as part of the unit price (McDonnell, Madar, & Been, 2011). In most cities today, housing must be built with on-site parking. While a major justification for reducing or eliminating minimum parking requirements is that it unnecessarily drives up the price of housing, the effect of bundled parking on housing prices remains poorly understood. To shed light on this relationship, we ask: What are the effects of parking provision on residential rents? We extend the literature by analyzing the effects of bundled parking on housing costs for renters in metropolitan areas across the U.S. We employ a nationally representative sample of housing units, the American Housing Survey (AHS), to rigorously investigate this question.

We approach this question from the perspective that a parking space or two represents a residential amenity, rather than a housing unit attribute that should be regulated for health or safety reasons (Shoup, 2005). A burgeoning academic literature has suggested that parking requirements increase housing prices and reduces supply, thus depriving people of the option to pay less for a unit without parking (Manville, Beata and Shoup, 2013). These empirical analyses use regression models to isolate the value of a parking space within the bundle of
housing attributes. For example, Jia and Wachs (1999) use a hedonic model to test the relationship between off-street parking and housing prices in San Francisco, finding that the average single family unit with off-street parking sold for 11.8% higher and the average condo unit with off-street parking sold for 13% higher. Manville (2013) uses a natural experiment in Los Angeles’s Adaptive Reuse Ordinance and finds that “an apartment with bundled parking is associated with $200 more in asking rent, and bundled parking with a condo is associated with a $43,000 increase in asking price.”

There are several mechanisms through which parking requirements act as a regulatory barrier to lower cost housing. Deakin (1988) and Quigley and Rosenthal (2005) argue that regulation can limit where development occurs, the density of that development, add standards for lots and buildings, shifts costs from the municipality to the developer, and create other direct and indirect controls on growth. Despite the well-developed nature of these independent strands of research, previous research on the relationship between parking supply and housing costs for renters is lacking. Data for this study are derived from the 2011 American Housing Survey (AHS). Using the 2011 AHS micro-data, we analyze 32,754 rental units in metropolitan statistical areas, statistically representative of the national housing stock in metropolitan areas. To answer our primary research question, we build a multivariate, hedonic regression model to isolate the underlying equilibrium price for each housing attribute. In addition to parking variables, our model includes unit quality and quantity characteristics, neighborhood characteristics, and intra-metropolitan area location attributes.

References

Abstract Index #: 417
10 YEARS LATER: WHAT PLANNERS CAN LEARN FROM HURRICANE KATRINA
Abstract System ID#: 163
Roundtable or Informal Discussion Session

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August 29, 2015 represents the 10 year anniversary of the levee breaches that flooded New Orleans, leading to one of the largest rebuilding processes of any U.S. region. In the period during and after Hurricane Katrina, popular media accounts shocked people who were unaware of the extent of poverty in New Orleans or the U.S. and could not believe the U.S. had so little capacity to respond to a disaster. In the years that followed, planners from around the U.S. and beyond came to New Orleans to assist and the focus turned to recovery.
Recent coverage tells varied stories. New Orleans’s population rebounded more quickly than expected but land loss along the coast continues to threaten coastal communities. The region has recovered nearly all of its peak, pre-Katrina job levels and shows some signs of economic strength (Brookings Institution, 2014), yet New Orleans ranks 2nd among American cities in income inequality and more than 1 in 3 children live in poverty (Mack, 2015). And while some neighborhoods have experienced resurgence—in some cases raising concerns of gentrification and displacement—others still face widespread blight and abandonment.

This roundtable will include planning scholars who participated in the New Orleans’ recovery efforts to reflect and interrogate what the planning profession has learned or can learn from the last decade of recovery and redevelopment in the New Orleans region. It will address the following questions: How did planning shape recovery and redevelopment? To what extent did planning—or could planning—lead to more equitable or just outcomes? How did lessons from Hurricane Katrina influence the planning response to Superstorm Sandy? What needs to change to facilitate more influential planning after disasters and during periods of rapid change?

References

Abstract Index #: 418
THE LEGACY OF ZONING AND RURAL HEALTH DISPARITIES IN THE SAN JOAQUIN VALLEY
Abstract System ID#: 188
Individual Paper

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Population densities are one way to define rural places, but factors determining who lives where are a complex and interdependent set of social, political, and economic variables. One often-overlooked variable in where people live is zoning. Although introduced as a public health strategy for separating industry pollution from residences, this was for an urban perspective of high-density populations. In contrast, rural areas experienced zoning in a different way from their urban counterparts. In the late 1870s, zoning for agriculture land helped create rural areas in California through the restriction of where people could live. Private developers contributed to this creation of the rural by building single-family homes that further ensured low-density populations. Together zoning and low-density development supported the formation of rural areas throughout the San Joaquin Valley. In these areas, zoning for agriculture also meant an increased demand for low-wage workers that was met with federal policies supplying labor from immigration and seasonal workers. Cheap labor and land continued to be attractive to companies looking for locations for heavy and light industry, and subsequently concentrated pollution in these areas. With zoning ordinances pushing out industry from urban places, companies looked to rural locations with fewer residents. What defines the rural, such as low-population densities, made these locations attractive to industry, but also led to an increase of private companies utilizing cheap land costs and low-density areas for polluting industries unwanted in larger urban areas. One outcome of locating industry in rural areas was increased public health concerns for rural residents from air, land, and water pollution. In this way, city planning policies that contributed to creating rural places also contributed to a legacy of health inequities in the San Joaquin Valley.
Using an Environmental Justice framework I examine three questions: 1) How have zoning ordinances shaped the creation of rural places in the San Joaquin Valley? 2) How have these zoning practices contributed to a legacy of health inequities that persist today? And 3) How can city planning and public health organizations together address these health inequities? To answer these questions I use historical, content, and text analysis of historic planning documents and maps along with historical and current US Census data and public health data. Preliminary findings from this study show zoning in the San Joaquin Valley has contributed to the health inequities through land use decisions, but these decisions become self-reinforcing. Cheap land in rural areas has attracted industries, but this has meant more land, water, and air pollution decreasing land values and increasing health disparities. Measuring the impact of pollution on health in rural areas is difficult because residents are exposed to many pollutants, but one way is to understand the cumulative impact of various pollutants on health. Addressing health inequities in the San Joaquin Valley cannot be addressed through city planning or public health alone, but must include a multi-disciplinary approach that considers the legacy of inequality in the area, and the effect of cumulative impacts from pollution.

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Abstract Index #: 419

READY OR NOT: LOCAL LAND USE PLANNING AND SUSTAINABLE STORMWATER MANAGEMENT

Abstract System ID#: 210
Individual Paper

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Since the 1970s, populations increasingly began to reside in suburbs rather than in urban cores in the United States (Levy, 2011). The rapid and sporadic urbanization eventually increased the percentage of impervious surfaces and, thus, caused negative hydrologic consequences, including excessive runoff and water quality degradation (Booth and Jackson, 1997). In particular, the characteristics of watersheds have been deteriorated, compared to the pre-development flow regime, by decreased peak flow time and baseflow (Brabec, 2009; Paul and Meyer, 2001). A substantial body of research has been conducted to investigate the impacts of land cover changes on the watershed responses, including surface runoff and hydrological changes, at the site-scale. However, there is few, if any, empirical research examining how the planning efforts influence on minimizing surface runoff.

As part of my dissertation research to understand the degree to which local policy makers and planners recognize and adopt sustainable stormwater management strategies and policies, an empirical investigation was conducted through evaluating county comprehensive plans within the Chesapeake Bay Watershed. The watershed covers 166,000 km2 and encompasses six states in the mid-Atlantic region, including parts of Delaware, Maryland, New York, Pennsylvania, Virginia, Washington, D.C., and West Virginia. The Chesapeake Bay, which is the largest estuary in the U.S., is a critical area for natural resources, but has been significantly polluted due to stormwater runoff led by rapid urbanization. This study explores the gap in the empirical research by answering two critical
questions: (1) To what extent have local jurisdictions integrate the key principles of sustainable stormwater management planning within their comprehensive plan? (2) What are the effects of planning efforts (factors) on mean and peak streamflow?

To address the research questions, the data was analyzed in two phases. First, an established content analysis method was used to assess 31 local comprehensive plans; by comparing their plan breadth and depth scores, the study identified which counties re-examined the past drainage design and land use planning tools to create a sustainable stormwater management system that integrates adaptive implementation strategies to climate change. Second, a multiple regression analysis was used to examine the degree of association between planning factors and mean and peak streamflow, by controlling land surface, environmental and geographical factors. The main data of this study are aggregated at the watershed level. Mean annual runoff and peak discharge data are obtained from the U.S. Geological Survey (USGS). Land surface, environmental, and geographical data are obtained from the USGS National Land Cover Dataset (NLCD), the National Hydrography Dataset Plus (NHDPlus), the Federal Emergency Management Agency (FEMA), the Natural Resources Conservation Service (NRCS), the Parameter-elevation Regressions on Independent Slopes Model (PRISM) Climate Group, and the US Census Bureau.

The study finds that most local jurisdictions are likely to have weak land use plans toward integrating sustainable stormwater management principles and policies. Moreover, watersheds with relatively high plan scores tend to experience more volume of surface runoff, meaning that these local jurisdictions already recognized the flooding threats and created more clear and specific visions, goals, and policies to mitigate runoff damages. The findings are anticipated to inform local governments, decision-makers, and planners to increase their awareness and understanding about the concept of sustainable stormwater management, thus contributing to the improvement of implementation plans that incorporate comprehensive ecosystem and land use planning.

References
making. The comprehensive planner, the advocacy planner and the planner as mediator are all identifiable roles which practicing planners occupy, sometimes within the same job. The extent to which these roles continue to be relevant in the context of cities with persistent conditions of vacancy, and little or no new development to review, advocate for or against, or mediate, is not clear. Vacancy is not a new problem in American cities (Bowman and Pagano, 2004; Ryan, 2012), and planners have performed a variety of roles in those cities. However, much of the planning literature on the importance of participation and process (Innes and Booher, 2010) has not been addressed or utilized in the literature on vacancy. This is perhaps the result of the absence of escalating conflict around vacant parcels, since these typically suffer from a lack of interest, rather than a surplus. But it is increasingly clear that vacant land, even when minimally managed, can provide a range of services to a city and its residents (McPhearson and Kremer, 2013). This raises the question of how planners can support, enhance and take advantage of these services more effectively. The basic hypothesis is that it is possible for planners to productively engage a range of stakeholders to build consensus on the development of multiple (ecosystem) services on vacant parcels in a cost-effective manner. The research methods consist of a series of semi-structured interviews with planners and stakeholders related to vacant land management and environmental issues in New Orleans. These interviews were transcribed and analyzed to assess the framing of vacant land as problematic or potential sources of resources. In addition, we have developed a negotiation simulation that models consensus building efforts around specific vacant parcels in New Orleans. We have run this simulation during an interactive workshop, convened by NORA, in New Orleans, with approximately 15 stakeholders. Based on interviews with these stakeholders after the workshop, we were able to compare their perceptions of vacant land before and after our intervention.

References

URBAN PLANNING IN THE SUBMERGED STATE: THE CASE OF THE NEW YORK CITY ECONOMIC DEVELOPMENT CORPORATION

Since its inception in 1991, the non-profit New York City Economic Development Corporation (EDC) has become a pivotal force in the redevelopment of the largest city in the United States. Alternately hailed for its flexibility and professionalism and derided as an unaccountable, shadowy behemoth, the EDC has served as both a catalyst for debate about the changing city and as a potential model for new institutions in other cities. Although the EDC has been the object of both exaltation and opprobrium, neither the EDC model nor the reasons for its emergence have been the subject of detailed scholarly attention. The narratives of industrial restructuring and government retrenchment that have dominated analysis of urban development in recent decades do not adequately account for the emergence of the EDC. Although the EDC serves many functions, its core role is that of an intermediary for the creation of complex financing arrangements. Such arrangements have become increasingly important to urban development, due to changes in the modalities of spending by the U.S. government and the (related) increased complexity in U.S. tax law.
As an institution, the EDC both relies on and contributes to the development of what Mettler (2010; 2011) terms "the submerged state," which filters social policy through the tax system rather than through more visible mechanisms of government intervention. While the use of tax incentives in urban development has hardly escaped attention, analysts of urban politics have not treated it as a focal issue in institutional analysis. Yet it marks a crucial difference between the EDC and earlier importations of private corporate form to urban government. This article traces the emergence of the EDC in the context of a changing federal system, finding that shifts in national spending priorities and tax policy have created powerful incentives for local governments to create the sort of complex financing arrangements that the EDC intermediates. Yet, the form of the EDC owes at least as much to the gradual and largely haphazard accretion of state and local law, reflecting a persistent inter-governmental struggle over the power to regulate economic resources.

References


IDENTIFY THE VALUE ORIENTATION AND ROLE OF GOVERNMENT IN URBAN RENEWAL: EVIDENCE FROM GUANGZHOU AND SHENZHEN

Abstract Index #: 422

Urban renewal in China can be classified as being in a government-dominated mode. Local authorities typically operate as the principal players in the affairs of urban renewal. Economic growth for the benefit of local elites, rather than enhancement of the well-being of local residents, has become the real underlying motivation of political alliances between local governments and private enterprises (Yan and Fang, 2004; He and Wu, 2005). As a “rational economic man”, government pursues its maximum interests both in political decision-making and economic decision-making in the process of urban renewal. Government value orientation towards urban renewal determines its roles and behaviors in renewal affairs, including determining renovation entities, land development rights reconfiguration, share allocation over stakeholders and compensation to original property owners.

Although existing studies on urban renewal in China had noted the significant role government plays in urban renewal (Li and Li, 2011, Liu, 2011, Tian et al, 2015), they however, have not adequately addressed why cities in China have different attitude or value orientation on urban renewal, and still lack of in-depth cross-municipal comparisons. This paper tries to explore the roles and functions of local authorities in urban renewal by comparing two cities in China which displays different characteristics as it relates economy and local public finance. The paper attempts to clarify two questions: 1) what are the value orientation that Guangzhou and Shenzhen government holds on urban renewal? 2) What are the determinates on the role of government during the urban renewal process, in terms of attitude and actions.

We firstly build an analytical framework to illustrate the roles and position government holds on urban renewal, and depict its public value orientation and private value orientation towards urban renewal. Secondly, we list main policy tools which are used to realize government’s objects and value in urban renewal process and then make comparison in value orientation and government’s role in urban renewal programme between two cities. Finally, we deduce the cross-municipal differences between economy, finance and land resource.

The paper employs a mixed method approach that combines literature research and case study. Policies concerning land redevelopment and urban renewal in these two cities are collected to analyze the government value orientation and role. Data such as land leasing, land banking, land value in terms of per unit floor age,
among others are prepared for secondary analysis to interpret cross-municipal difference. We also select distinctive urban renewal projects which had been investigated previously in Guangzhou and Shenzhen to illustrate the mode of urban renewal in two idiosyncratic cities.

Since government revenue in Guangzhou relies heavily on land conveyance fees, the Guangzhou government is inclined to apply government-dominated mode in urban renewal to acquire land conveyance fees (Tian, et al, 2015). While, Shenzhen government gives away land development rights to the rural collective, from which the rural collective makes profit. Shenzhen had realized profit-sharing regime to burden-sharing regime in urban renewal (Liu,2011). The research indicate that economy development and pattern, land leasing and local public finance have great influence on government value orientation and its policies in urban renewal. In the process of transition from developmental state to public service-oriented state, local authorities in China should be more concerned about the social and public significance of urban renewal, and take responsibility for mediation among different interests, construct power relations, and link aesthetic imagination with the public interest (Yan and Fang, 2004).

References


**WHY DO CITIES VOLUNTARILY ADOPT SUSTAINABILITY POLICIES? A META-REGRESSION ANALYSIS**

Common definitions of sustainability encourage society to strike a balance between economy, environment, and equity. While city governments have historically prioritized economic growth over other objectives, some have voluntarily adopted policies that place constraints on unbridled economic expansion in order to foster development that is more equitable and/or environmentally-sensitive. These policies have been given a variety of different labels, including “growth management”, “sustainable development”, and “Smart Growth” policies. Cities have also begun to adopt related policies to support global climate change mitigation efforts. We refer to all such policies as “sustainability policies”.

Economic theories of “rational behavior” suggest that cities would be unlikely to adopt sustainability policies because they might serve to limit economic growth and/or because the local costs of policy adoption might exceed the local benefits. In response to such theories, scholars from urban planning, public administration, and related disciplines have developed separate theories to explain why cities have nevertheless chosen to adopt sustainability policies when not required to do so (e.g. by senior government mandate). Such theories posit that local (1) government capacity, (2) political culture, (3) organized interest groups, (4) policy innovators, and/or (5) recognition of environmental risk and problem severity are all plausible factors in helping to explain sustainability policy adoption.
We employ meta-analysis and meta-regression methods to address the question “Why do cities voluntarily adopt sustainability policies?” We synthesize regression model results from 40 separate studies to test five separate theories of policy adoption and to provide estimated effect sizes for 30 individual factors that have been hypothesized in the literature to help explain policy adoption. Our effect size estimates are corrected for potential bias introduced into the literature through selective reporting practices on the part of researchers.

We generally find no more than limited support for each policy adoption theory and that the individual factors explored in the literature are moderately correlated with policy adoption at best, with many factors showing no correlation at all once the effects of selective reporting bias have been corrected for. The factor that appears to show the strongest positive correlation with policy adoption is the presence of a local government staff member who is specifically responsible for coordinating local activities related to sustainability, energy, and/or climate planning. Other factors generally believed to influence policy adoption (such as population size and growth rates, financial capacity, and general planning staff capacity) are found to have no correlation with policy adoption.

Our study is relevant to the planning discipline in the following ways. First, we provide a rigorous synthesis of disparate findings across multiple studies on the adoption of sustainability policies, which better informs planners, policy-makers, and researchers regarding the relevant impacts of a wide set of factors on policy adoption efforts. Our summary of findings highlights the potential role that sustainability planners might play in promoting local sustainability policies. Second, we introduce a new and evolving methodology to the planning literature that can be used to test and correct for the biases brought to the literature by selective reporting practices that are commonly employed by researchers when reporting their results.

References


INDUSTRIAL LAND REVITALIZATION POLICIES WHICH ARE DIFFERENT IN OWNERSHIP, FROM THE PERSPECTIVE OF FAIRNESS AND JUSTICE: A CASE STUDY OF SHANGHAI SONGJIANG

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The Ownership of industrial land dramatically varies in China. Transferring, requisition, leasing and renting are all possible ways of acquiring industrial land. The ownership, tenure and obligations vary dramatically in those ways. Lands with differentiated ownership are to transfer or renovate when used at low efficiency. The distribution of benefit gained after a value promotion of lands tends to be controversial. This paper discusses how to renovate industrial area under the preconditions of impartiality. Relevant findings are intended to offer a guild to facilitate the renovations of industrial areas containing industrial lands of differentiated ownerships under the preconditions of impartiality. The research focuses on Shanghai Songjiang Economic and Technological Development Zone. The content of this paper mainly consist of the following four parts: 1, analyzing the differentiations of four types of ownership of industrial lands under current legal and political framework; 2, estimating the minimum acceptable offerings for developers and the government and clearly identifying the boundaries between the society, the developers and the government.
based on the principals corporate social responsibility and the impartiality principle of increased value distribution of lands; 3, Seeking differentiated ownership transferring strategies of industrial lands by the case study and exploring relevant strategies employed during the renovation of Songjiang Economic and Technological Development Zone concerning transferring benefit from policies, compensations and unification of ownerships.

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Abstract Index #: 425

LAND USE PLANNING APPROACHES TO URBAN MANUFACTURING PRESERVATION IN BOSTON, CHICAGO, NEW YORK CITY AND TORONTO

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Individual Paper

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Land use planning conflicts continue to emerge in response to redevelopment pressures being exerted on urban manufacturing locations throughout North America. Real estate interests seeking to capitalize on favourable market conditions view industrial sites in desirable locations as being better suited for residential and commercial development and in response request planning redesignations. Conversely, manufacturing proponents view the focus on highest and best use outcomes as being detrimental to long-term economic development objectives. Their solution is the implementation of strong land-use planning strategies that preserve sites for current and future manufacturing-based employment opportunities.

This research utilizes a case study methodology to examine the land-use planning policies and regulations currently in place to protect industrial land in Boston, Chicago, New York City and Toronto. A qualitative analysis is completed to examine planning documents and media reports, and key informant interviews are conducted with local stakeholders to incorporate their perspective into the discussion. Additionally a quantitative overview of the industrial land situation in the case study cities is included for context.

Changing conditions have resulted in modifications to each city’s approach to industrial land preservation. This research will review the rationale for these revisions and assess the potential impacts on future industrial land use planning efforts. Briefly, Boston is adopting zoning overlays while supporting its Back Streets program, Chicago is reviewing the effectiveness of its landmark Planned Manufacturing District zoning designation, New York City adopted Industrial Business Zones during the Bloomberg administration, and Toronto recently completed a Municipal Comprehensive Review of its employment lands strategy.

The analysis will focus on key themes that emerged during this research, including: the effectiveness of zoning as the primary planning tool for protecting industrial land; the influence of the local planning process on industrial land conversion outcomes; the viability of integrating manufacturing into mixed use developments; and the disconnect between land use planning and economic development.

References

EXURBAN GROWTH INSIDE THE URBAN GROWTH BOUNDARY? AN EXAMINATION OF RESIDENTIAL DEVELOPMENT IN URBANIZABLE AREAS IN OREGON

Abstract Index #: 426
EXURBAN GROWTH INSIDE THE URBAN GROWTH BOUNDARY? AN EXAMINATION OF RESIDENTIAL DEVELOPMENT IN URBANIZABLE AREAS IN OREGON

Abstract System ID#: 619
Individual Paper

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The renowned Oregon Statewide Planning Program has been in place for over 40 years. The Oregon approach requires every city in the state to establish an urban growth boundary (UGB) and adopt a comprehensive plan addressing the 19 Statewide Planning Goals which must be acknowledged by the Land Conservation and Development Commission. Oregon state law requires that UGBs have enough land to accommodate 20 years of population and employment growth. But, all land inside the UGB is not immediately available for urban development. Land is not annexed to city limits or zoned for urban densities when it is added to the UGB. The idea is that land will be annexed to cities over time, and UGBs will expand over time to ensure there is adequate land supply for 20 years of growth. This study focuses on the “urbanizable area” – land within the unincorporated areas within the UGB that are reserved for future urban use, but are currently largely undeveloped and lack urban services.

Since the program’s inception, there have been several studies written about land values, housing affordability, and development patterns. (Knaap, 1985; Nelson & Moore, 1993; Nelson & Moore, 1996; Jun 2006) Many of these studies focus on the Portland metropolitan area. In a similar study, Weitz and Moore (1998) examine the contiguity of development inside the urban growth boundary in four case study cities. This study adds to existing literature on Oregon by examining the pattern of development inside the UGB in a variety of cities outside of the Portland metropolitan area.

Our research focuses on residential development in the urbanizable area. Our study is twofold: First, we will describe the rate and density of residential density in the urbanizable area. Then, we will assess the institutional and market factors contributing to observed development in the urbanizable area. Examining 120 cities outside of the Portland Metropolitan area, we use property assessor’s taxlot data and GIS, spatial analysis and regression analysis to describe and analyze development in the urbanizable area from 1983-2012. Preliminary results show that, in some cities, several taxlots in the urbanizable area are being developed as low density residential development. The results have important implications for future development patterns and UGB expansions as low-density development at the fringe of UGBs may constrain available land supply, cause more frequent UGB expansions and lead to non-contiguous, leapfrog development. We will offer policy recommendations for limiting low-density residential development in the urbanizable area.

References

The purpose of this study is to measure the extent to urban sprawl of the capital region and its impacts on the decline of inner cities. To explore the region, its urban sprawl is measured using urban sprawl indices, and the decline of the central city, Seoul, is measured using the decline indices of each sub-administrative boundaries (Dongs) with Seoul. And then, the paper uses a multiple regression model where changes in population and employment are used as dependent variables and the ratio of population who moved to outer areas from inner cities is used as an independent variable, which represents the extent to urban sprawl, along with other control variables.

The results show that urban sprawl in the region negatively affects the changes in population in Seoul, contributing to the decline of inner city areas, while the impact of urban sprawl on inner cities’ employment is not statistically significant.

References

Mega-events are the most adopted and powerful neoliberal strategy for city entrepreneuring these days, enticing large urban restructuring projects. In Brazil, to recreate the structure and the urban image allegedly for such events, the State and its partners subvert social housing and urban mobility priorities. If the housing problem in the country is already serious by itself, the making of the 2014 World Cup and 2016 Olympics have added a new element: megaprojects with extraordinary economic, urban, environmental and social impacts, including the forced eviction of 150,000 to 170,000 people. In Rio de Janeiro, the Panamerican Games 2007 were responsible for striking changes in land use regulations, opening up new real estate fronts targeted at global businesses, causing forced evictions and total disregard of environmental laws. A propos the mega events of 2014 and 2016, a number of changes in the urban structure has been planned and executed throughout the city, from the port area through the south to the western and northern areas; governments and private capital are proposing large architectural icons and strategic partnerships, and have adopted new urban marketing strategies. This study focuses on the neoliberal way of planning adopted in Rio since 1992 and analyzes, through the evaluation of government plans for the megaproject “Marvelous Port” and through empirical research, to what extent the State has been innovating or repeating its housing policies and what impacts they have had on the population.

In addition to a brief historical and bibliographical review, the essay examines enactments and local plans and presents results of two empirical studies, both undertook by the Graduate Program in Architecture and Urban Planning of the Universidade Federal Fluminense, Brazil. The first, having a probabilistic character, interviewed 385 protesters of the 2013 riots and collected data on forty variables. The second study did not have a probabilistic character and was undertaken in downtown Rio de Janeiro, an area currently in evidence due to the implementation of the “Marvelous Port” Project; it applied 104 surveys with 28 questions to users of public open spaces. The sample size and the fitness to a normal distribution made statistical inference possible for the variables studied, hence allowing the consideration of the downtown users’ universe. SPSS 20 was used for statistical analysis.

The work is relevant to scholars, endangered communities and policy makers because it reveals how new discourses may allow the adoption of old exclusionary practices.

References


Abstract Index #: 429

FOOD TRUCKS AS A TOOL FOR INFILL, ACTIVATION OF SPACES, AND MICROENTERPRISES: BARRIERS AND OPPORTUNITIES

Trailer food vendors are experiencing a renaissance in cities like Austin, Denver, Seattle, Atlanta, and many more. These food venues offer opportunities for small business startups with fewer long term risks associated with traditional brick and mortar restaurants. From a planning perspective, these trailer food vendors present a
challenge in terms of assessing the appropriate zoning or health codes for these non-permanent land uses. However, these new temporary land uses offer a unique way to utilize vacant or underutilized land as well as ‘activate’ public spaces through special street events. This flexible land use can foster new economic activity and diversity of land uses with the ability for these businesses to relocate as land values or interests change.

In the literature, establishing active spaces, ones where people want to visit and recreate, often requires a few ingredients such as diverse destinations, density of population near a space, and a more qualitative variable that includes sense of place and social attraction (McCormack 2008; Gehl 2011). Many of our cities have vacant land, underutilized parking lots, but also commercial and retail areas that seem to lack the luster of energy to bring people to wander, shop and take part in the space. Food trucks, and other mobile vendors, are a new option in planning to consider changing places that lack a density of activity with less infrastructure and start-up costs. In some cases this ‘activation’ intervention is temporary, but in some cities these temporary land uses in fact become semi-permanent. This paper will explore how from both the vendors’ perspective and a regulatory code perspective, how this temporary land use can be treated as a tool for both temporary and semi-permanent invigoration of public spaces and retail spaces. The key questions in this paper are to explore how trailer or mobile food vendors experience barriers to operation and success and analyze of relevant codes and policies to suggest best practices for planners. The methods for this study included two phases. The first phase included qualitative interviewing within the context of one city in the Great Plains region to account for experiences outside of the coastal and larger metropolitan planning areas. This is important for us to be able to assess best practices for communities that may not embrace the same cultural or political ideas from other parts of the country. The second phase is to review codes and regulations for approximately 20 cities to establish best practices regarding food trucks.

Initial conclusions have identified that some cities establish codes to allow semi-permanent establishment of vendors to occupy vacant or underutilized spaces while others focus on event-based activities that only engage in the activity for an evening or weekend. Codes or regulations may in fact not be a significant barrier to establishing a food truck, but planners may consider how to facilitate or encourage these land uses in strategic locations through the code or comprehensive plans.

References
biological and hydrological conditions. Many of the potential planning measures to adapt, including land use regulations, building codes, protecting and maintaining critical infrastructure, are in the purview of local governments. The fragmented local governmental system creates challenges to address a globally-scaled challenge, but offers an opportunity to engage local communities in planning to address climate change challenges and crafting adaptation strategies that are grounded locally. This research investigates recent suburban-level efforts in climate adaptation planning in Chester County, Pennsylvania. Based on a review of local plans, local regulations, and selected municipal case studies, local climate adaptation strategies are analyzed to identify the nature and extent of efforts and how suburban neighborhoods can be adapted to reduce further impacts of climate change and withstand ongoing change.

References


Abstract Index #: 431

DISPOSSESSION AND CHINA’S CHANGING URBAN-RURAL DIVIDE: A VILLAGE’S URBANIZATION JOURNEY IN PERI-URBAN GUANGZHOU

Abstract System ID#: 714
Pre-organized Session: New Perspectives on the Regulation of Land

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This ethnographic study investigates how China’s recent attempt to construct a model of “coordinated urbanization (chengxiangyitihua)” is predicated on and realized through rural dispossession. Since the early 2000s, the Chinese central state has imposed intensive waves of institutional, planning, and land reforms on Guangzhou’s peri-urban villages, which are problematized as an embodiment of the country’s backwards, socialist urban-rural duality and therefore an obstacle to China’s advancement in urbanization. In Guangzhou, the municipal state has identified 138 peri-urban villages for comprehensive redevelopment as part of this urban project. Building on fieldwork research in the province, this article examines the urban regime that the state intends to create, which comprises an economy based on land commodification, a spatial planning regime in which the state’s economic restructuring agenda dictates collective land use, and a city land system dominated by state ownership. This ethnographic study, conducted in Duntouji village, shows that villagers’ present engagement in the redevelopment scheme cannot be separated from the dispossession of the past: loss of farmland to Guangzhou’s economic development zone in the late 1980s; subjection of collective assets to industrial land use by the planning authority since 1991; the resulting meager collective economic base; on-going exposure to industrial pollution. These various forms of dispossession, each contingent on the previous, epitomize two struggles villagers face: a yearning for urbanization complicated by concomitant worries over lost entitlements associated with the collective, and discomfort with the tradeoff between off-site redevelopment and continual proximity to environmental hazards. This article argues that, while forced relocation and political conflicts are a less-observed phenomenon in village redevelopment, various forms of dispossession are deeply, temporally embedded in changing urban-rural spatialities.
TDR FOR DEVELOPMENT ENTITLEMENTS: AN ASSESSMENT OF FLORIDA’S RURAL TRANSFER OF DEVELOPMENT RIGHTS PROGRAMS

While the planning profession remains concerned with the core challenges of managing growth—including preventing sprawl, promoting compact development, and protecting resource lands—many of the tools used to address these issues are increasingly seen as heavy-handed, ineffective, and outmoded (Buitelaar and Needham 2007; Chapin, 2012; Schwartz, 2012; Wright and Czerniak 2000). Land use planning tools including comprehensive planning, zoning, and “other elements of police power-based planning” are seen as inefficient compared to “voluntary, negotiated, financially compensating methods of land use control” (Wright and Czerniak, 2000, page 419). There are questions about the utility of regulatory approaches to growth management for addressing contemporary planning concerns, such as promoting economic development, protecting property rights, downsizing government, and facilitating desirable development outcomes like mixed use and infill (Chapin 2012; Nelson 2006).

Dissatisfaction with the processes and outcomes of regulatory land use planning has prompted increased focus on more flexible tools. Foremost among these in the growth management arena are transfer of development rights (TDR) programs, which facilitate a market for the exchange of development rights for the purpose of redirecting growth to areas deemed more appropriate for development. TDR can decrease inefficiencies resulting from zoning, compensate property owners for property rights restrictions, and leverage private dollars to protect rural land (Nelson et al., 2012; Preutz 2003).

This study builds on previous research on TDR in Florida that identifies an emerging trend of using TDR to foster a mix of economic development, environmental stewardship, and desirable urban forms in Florida’s rural areas (Linkous and Chapin, 2014). Florida’s rural TDR programs are reflective of a larger trend in land use policy toward “multistakeholder collaboration and voluntary market-based mechanisms, designed to forge a compromise between nature protection, property rights, and local livelihoods” (Schwartz, 2012, page 2324). This shift has been particularly pronounced in Florida, where the state’s 2011 Community Planning Act “rolled back 25 years of growth management” initiated under 1985 Growth Management Act (Pittman, 2011) in favor of a policy framework oriented toward economic growth and flexibility in the development process.

Through case study analysis, I find that the flexible, voluntary, and market-based provisions in Florida’s rural TDR programs 1) enable significant new development entitlements and 2) yield projects that fall short of goals of creating compact communities and limiting sprawl due to non-participation in voluntary options and incentives, loopholes, amendments, exceptions, and other mechanisms. These findings suggest that, while these programs are intended to support mutual gains for the private and public sectors, Florida’s rural TDR initiatives redesign land use markets to favor private sector opportunities over public growth management goals. These findings raise questions about the appropriate market framework to use with TDR, and indicate that flexible, market-based, and voluntary approaches to growth management require further refinement to ensure a more balanced public-private partnership.
AMENITY MIGRATION AND LAND USE PLANNING CONFLICTS

Abstract Index #: 433
Abstract System ID#: 748
Individual Paper

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Amenity migration is the movement of people being attracted to certain locations based on their natural and cultural amenities, which might cause significant changes and conflicts in the local communities with respect to land use, ownership and governance (Gosnell & Abrams, 2011; Walker & Fortmann, 2003). Amenity migration of elite or middle income groups has mostly been associated with aspirational ruralism (Gosnell & Abrams, 2011; Cadieux & Hurley, 2011). In planning literature, amenity migration has been studied specifically since 1970s but in very diffused nature with literature published in journals in natural studies, rural studies, aging, mountain research, tourism, etc. (Gosnell & Abrams, 2011). These studies mostly focus on upper or middle-class migration to a rural community for a different lifestyle as “newcomers” either staying seasonally as second homes (Kondo, Rivera, & Pullman Jr, 2012) or permanently (Smith & Krannich, 2000; Loeffler & Stenicke, 2007; Walker & Fortmann, 2003; Bryson & Wyckoff, 2010). Woods (2011) point out to the changing trends in amenity migration, which is that it is becoming increasingly global, engaging these local areas in global networks (Woods, 2011).

Globalization and the corresponding information, communication and transport technologies have introduced more places and lifestyles to people. Nowadays, people know more about other locations, which increases their curiosity and willingness to experience different lifestyles based on certain natural and cultural amenities. The amenity migrants pursue a certain lifestyle and they would like to preserve the existing rural charm. However, this might collide with the aspirations of the locals, who might pursue economic boosterism in their communities. These different demands on the local landscape may result in land use conflicts between amenity migrants and local population. Based on this, we argue that amenity migration should attract more focused research in planning literature.

There few existing studies under this framework. Kondo et al. (2012) demonstrate through their case study on two counties of Washington State in terms of how second homeowners desire for privacy and isolation lead to certain conflicts over land between long-time residents and newcomers. Woods (2011) examine how affluent migrant groups would like to protect the existing rural ambiance in Queenstown, New Zealand, by controlling the development in the region.

In our paper, we are making a call to planners to conduct more research on the dynamics of land use planning in amenity rich areas across the world. Each region of the global triad has different dynamics and cross-country comparison that may add more insights to the specifics of how these localities absorb or resist amenity migration.
issues in their planning framework. For this study, we employ a comparative case study approach by analyzing two cases from the U.S. and Turkey. In the U.S., we focus on Wellington, Florida, a global equestrian node that attracts super-rich amenity migrants and a well-known great hometown for the upper middle class. In Turkey, we focus on Alacati, Izmir, which in the recent years have become an important global wind surfing location as well as amenity-migration hot-spot for affluent groups from Turkey and other countries, which has resulted in gentrification in this small town.

References

Abstract Index #: 434
FACILITATING BUSINESS IMPROVEMENT DISTRICTS AND THE POTENTIAL PITFALLS FOR PUBLIC ACTORS
Abstract System ID#: 772
Individual Paper
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Under the influence of the economic downturn and institutional changes in society, urban development practice in the Netherlands is shifting away from the traditional top-down, public-sector led development model. Now alternative forms of urban development, aimed at private-led, so-called ‘organic’ urban development, are advocated both by Dutch cities and the national government. In this new form of urban development public actors in the development process limit their role in urban development to reducing barriers and facilitating private initiatives, as opposed to the active role in development they had for multiple decades. One of the concepts that has been introduced to invigorate the shift in planning is the business improvement district, a concept for overcoming collective action problems that enables private investment in public space in the built environment. After six years of experimentation legislation was passed by the Dutch parliament to enable the creation of business improvement districts. Although the experiments were generally conceived as successful, the evaluation of the act shows that public actors are unsure how to shape their new role in the urban development process. Aiming to contribute to existing knowledge and the current application of the facilitating role of public actors in urban development practice in the Netherlands, a study was conducted in the way public actors shape their facilitating role in creating and managing business improvement districts in the State of Wisconsin. Inspired by Healey’s (2006) distinction between hard and soft infrastructure in collaborative planning, this research hypothesized that facilitating private-led initiatives, like business improvement districts, includes more than just enabling through legislation. However, the concept of facilitating through soft infrastructure implies serious considerations for public actors. Through a critical review of literature this paper builds upon this empirical research and critically reviews the implications of facilitating business improvement districts by public actors, while arguing that urban public space should be conceived as an urban common. The starting point for this paper is the empirical research in Wisconsin. The ways business improvement districts are facilitated by public actors in Wisconsin is outlined and, inspired by Foster (2011), the potential pitfalls of facilitating business improvement districts are examined. For example, does facilitating private initiatives in the built environment like business improvement districts create inequality between neighborhoods in a city? This paper argues that the
concept of facilitating business improvement districts in general is desirable, but public actors have to keep considerations of inequality in mind while doing so to prevent inequality between neighborhoods in the city in the longer term.

References

Abstract Index #: 435
**MUNICIPAL INCORPORATION AS A SOCIAL JUSTICE TOOL? POST-INCORPORATION OUTCOMES IN NEW CITIES OF COLOR**

Central theme or hypothesis: what research question are you trying to address?

Between 1990 and 2010, 44 new cities of color (Black, Hispanic, or Native-American majority) formed for reasons ranging from improving services to combating nuisances such as locally undesirable land uses. What happens after incorporation, particularly in new cities of color that may lack a sufficient tax base? Are residents better off, or worse off (e.g., fewer services and higher taxes)? Moreover, what strategies do the new cities use to address fiscal and service challenges? Post-incorporation outcomes have not yet been sufficiently studied for new cities of color.

Approach and methodology: how will you address that question?

The research features in-depth case studies of five new cities of color (51% or more minority population). The five cases represent four of the states where new cities of color form most frequently, and include two Black-majority cities, one Hispanic-majority city, and one Native-American majority city. A content analysis of newspaper articles before and after incorporation was conducted to identify the challenges these new cities faced after incorporation. The study also assesses city budgets, taxation rates, and employee data from local, state, and federal data sources to determine pre and post-incorporation taxation rates and revenue. Interviews with respondents from each city provide additional insights regarding post-incorporation outcomes, challenges faced, and strategies the new city employed to address such challenges.

Relevance of your work to planning education, practice, or scholarship

Communities often incorporate to enhance local governance and control. Scholars have also highlighted the potential of municipal incorporation as a civil rights tool to ensure communities of color and low-income communities receive equitable service provision. But what happens after incorporation? How does incorporation change the tax burden and services for residents? Do some residents receive lower services and higher tax burdens, contrary to their expectations? Without knowing what happens after the cities have formed, we cannot truly assess the social justice potential of municipal incorporation. The research is also critical to boundary change scholarship, as municipal incorporation literature has not yet examined post-incorporation outcomes for new cities of color. In addition, the research provides practical lessons for communities of color considering incorporation and thus is intended as a social justice tool in and of itself.
Since its inception in 1926, land use regulation has been by far the most important regulating trend for addressing a variety of urban problems, one of which is controlling sprawl through the use of growth management programs. Beginning in the 1960s and 1970s, growth management programs began to gain popularity, especially in Oregon, Florida, and Maryland. While the benefits of growth management programs have been touted for decades, with controlling sprawl identified as the “principal spatial objective”, there is little to no concrete empirical evidence about the effectiveness of growth management programs in controlling sprawl (Bengston et al., 2004; Pendall 1999; Landis, 2006; Carruthers, 1992, p. 391).

Growth Management programs vary widely. According to Feiock et al (2008), there are two generations of growth management programs: the first focused on exclusion through growth moratoria and development restrictions, and the second focus on redirecting growth, not limiting it. We have identified sixteen growth management tools. The tools in discussion are Tax increment financing, Concurrency (Washington, Florida), Adequate public facilities ordinance (Maryland), Purchase of development rights / Easements, Priority funding areas, Open space acquisition / land conservation requirements, Transfer of development rights, Zoning, Density bonuses, Growth moratoria, Permit limits, Urban growth boundary / Urban service limits, Impact fees, Transit investments, Road investments and Land trusts.

For example, a study of 695 U.S. cities analyzed the effect of impact fees on local capital spending, property taxes and long-term debts. The study concluded that impact fees were not commensurate to cover costs associated with new developments and simply acted as a supplemental form of revenue for communities. To make up for the difference, the authors found that municipalities increased capital spending and long-term debt issues. The authors conclude that while impact fees were associated with property tax reductions the fees themselves did not represent “powerful tax relief measures” and actually appear to encourage additional development in some areas (Jung et al., 2009).

We are proposing to conduct a comprehensive literature review on the use of these tools and how they contribute to the re-densification of urban areas and promote mixed use development, street network connectivity, job density and transit supply (Zhang 2006; Zhang 2010) throughout the United States. The existing literature provides documentation of various places in the United States, but what is lacking is one piece of literature that takes an overview of the entire country, following their growth management programs,
and taking stock of what tools worked well, and what did not work as well as expected. Peer-reviewed literature collected shall contribute to a meta-analysis, which will help us draw conclusions about the effectiveness of such programs across the country. Furthermore, this study shall also help us determine which of the tools are most effective in reducing sprawl, such that they may be used in later research.

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Abstract Index #: 437
TRANSFERABILITY AND APPLICABILITY OF PORTLAND'S URBAN GROWTH BOUNDARIES IN CHINA: A CASE STUDY OF SUZHOU CITY, CHINA

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Individual Paper

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Over the next 10 to 15 years, China’s urban population is projected to increase by 150 million and its urbanized areas to double in size. Many fast-growing Chinese cities are in urgent need for strategies to guide urban development in economically efficient, environmentally friendly, and socially just ways. In order to control urban expansion, fourteen large Chinese cities have been exploring the use of urban containment strategies as pilot efforts encouraged by the central government. One of the fourteen cities, Suzhou, is seeking to apply growth management practices similar to urban growth boundary (UGB) adopted in Portland Metropolitan area.

This research paper aims to study whether Portland’s UGB can be effectively transferred to large cities in China and uses City of Suzhou as a case study. Scholars and practitioners in the urban planning-related fields have long studied Portland's UGB. Research results have indicated that, when bundled with farmland protection, inner city land use planning and regional transportation polices, Portland’s UGB can effectively curb urban sprawl, promote inner city livelihood, protect surrounding agriculture and forest land, and further increase the attractiveness of the entire community (Kasowski, 1991; Moore and Nelson, 1994; Nelson, 1992; Song and Knaap, 2004). However, cities in the US and China differ substantially. Barriers do exist in the adaptation process of the UGB policies in China.

The project will use literature review, content analyses and interviews with planners and public officials to identify economic, social, political, and institutional barriers to UGB adoption in China. It will highlight differences in the planning, policy-making, and implementation processes between the two cities (Portland and Suzhou) that will likely influence the outcomes of UGB applications. At the end, this paper hopes to provide recommendations on the necessary organizational and technical preparations for UGB adoption in Chinese cities. It will also suggest modifications to Portland’s UGB approach to fit the contexts of Chinese cities (e.g., Suzhou).
References


Abstract Index #: 438

WHAT TIME IS YOUR PLAN? THE 100-YEAR PLAN AND THE RETHINKING OF THE PLAN HORIZON

Abstract System ID#: 961
Individual Paper

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How long should a long-range plan look into the future? The most common time frame or plan horizon of a comprehensive city plan is 20 to 30 years but what are the implications of using this versus other potential time frames? This paper builds on case studies of the North Vancouver 100-year Sustainability Vision and the more recent Official Community Plan (utilizing the 20 year plan horizon), as well as the citiesPLUS 100-year plan prepared for the Greater Vancouver Regional District. The paper examines how time frames public dialogue on possible futures and explores the role (and conception) of time and the ‘future’ in planning. It concludes with a contemplation on the possibilities of long-range thinking in long-range planning.

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Abstract Index #: 439

UNTANGLING EMINENT DOMAIN: A CROSS-NATIONAL ANALYSIS

Abstract System ID#: 1010
Individual Paper

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All governments in the world have legal powers to take land and buildings for public interests – variously defied. Eminent domain is an American term. The concept is known in other countries as expropriation, compulsory purchase, compulsory acquisition or similar terminology in different languages. Eminent domain encapsulates in dramatizes the inherent conflict between the legal expectation in the USA and in many other countries that property rights be protected on the one hand, and on the other hand, that governments would be able to achieve their obligation to protect and promote public interests. Conflicts over eminent domain may turn ugly in the social, political or legal arenas where they occur.
Perhaps because the nerves surrounding eminent domain are often so raw, planning scholarship has generally shunned this issue, leaving it to legal scholars, political-scientists or economists. Yet, planners will have to continue to resort to eminent domain power (directly or, often, indirectly thought negotiations). Indeed, in many contexts - both in North America and globally - the range of public purposes for which eminent domain is a planning instrument seems to expand over time. From time to time, a big eminent domain story captures the public’s attention, as did the Kelo decision by the US Supreme Court in 2005. Yet even this “big time” case, after it subsided, did not stimulate enough research.

Eminent domain issues are much more multi-faceted than those addressed in the Kelo case and pose deep challenges, as well as opportunities, for planners. The paper argues that eminent domain should not be regarded by planners as a "given", a force of nature out there. Eminent domain is not monolithic but varies greatly from state to state, over time, and especially, internationally. Although it is a legal issue, eminent domain should also be regarded as an issue in which planning scholars and practitioners should engage. To some extent, planners can help to shape the contours of eminent domain in legislation, practice, and in the court arenas.

The paper first presents a set of parameters for international comparative analysis of differences in eminent domain regimes. Focusing on the first and second parameters, the paper then applies them to the analysis of selected Western countries. The parameters include:

- Degree of constitutional protection of property
- Definition of the “public purpose”
- Definition of “the public” served
- Definition of legitimate operators
- Permitted time frames
- Linkage with planning regulations
- Negotiation and alternatives to ED
- Rules regarding compensation

No large-scale and systematic comparative research has been published on eminent domain. There is no data base on incidences of expropriation, their contexts, or compensation paid. This paper does not purport to fill in the entire void, but rather to highlight that there are many modes and variations in the law and practice of eminent domain, and thus alternative formats from which to learn. This paper will draw, in part, on the findings of my study of 13 OECD countries on a related topic – called “regulatory takings” in the USA (meaning diminution of property values due to planning or other regulations, without transfer of title). These findings will be supplemented with additional information directly relevant to eminent domain laws and practices in selected countries.

Even from the limited comparative research available, one learns that there are indeed major differences among nations and states. Since there is no eminent domain regime that is considered satisfactory by all stakeholders, there is much room for cross-national exchange of knowledge. To an onlooker, such differences may seem trivial, but where expropriation is concerned, “the devil is in the detail”. These differences provide rich opportunities for cross-national learning across countries.

References
A 2008 California state law (“SB 375”) aims to reduce travel-related greenhouse gas emissions through coordinated land use, housing and transportation policies. Each of the state’s metropolitan planning organizations was required to adopt a sustainable communities plan along with its regional transportation plan. Adopted metropolitan plans in California now promote infill development, new housing and mixed land uses near high-quality transit, increased land use intensity, and preservation of agricultural and resource lands. Implementing these metropolitan plans is dependent on local land use plans and regulations (Barbour & Deakin, 2012). These plans, policies and public initiatives include reduce parking requirements, increased allowable densities, development incentives, and infrastructure investments. This paper analyzes the economic benefits and costs of these types of planning interventions in terms of housing prices, commercial property prices, municipal fiscal impacts and changes in travel behavior.

Few studies have analyzed the impacts of smart growth policies individually and our paper fills a major gap by analyzing the trade-offs associated with local land use interventions. We chose five case studies representing a breadth of California plans, policies and contexts. These include midtown San Jose in the Bay Area; downtown Turlock in the Central Valley; the Vermont-Western station areas in Los Angeles; and Rio Vista West and downtown East Village neighborhoods in San Diego. We analyzed what occurred in each case between policy adoption (typically in the late 1990s or early 2000s) and 2010 in terms of population, housing, demographics, employment, housing rents and sales prices, commercial sales prices, municipal fiscal impacts, and changes in travel behavior. We combined quantitative analysis, using county tax assessor data, business establishment data, Census/ACS, household travel surveys and other sources, with interviews and field work at each case study site. We then constructed a counterfactual scenario reflecting a reasonable expectation of what would have occurred in the absence of smart growth planning interventions. We analyzed benefits and costs from four perspectives: societal, municipal, owner households, renter households, and low-income households.

We found that policies in most cases had positive net benefits for the region, municipality, and households. Benefits varied by case, but generally arose from more efficient infrastructure and public service provision, lower housing prices due to increased supply, and slight reductions in vehicle travel. In the Vermont-Western station areas, for example, the plan appears to have shifted some housing and commercial demand to infill rather than greenfield development, saving the region roughly $5.7 million per year public service costs. The plan’s policies helped increase revenue for the City of L.A. through higher property tax, sales tax, and one-time impact fee revenue. The extra revenue outweighed the extra cost of providing services to additional residents. In terms of housing, by allowing more multifamily housing units, the plan led to a slight price reduction for multifamily units, generating a benefit of roughly $700,000 annually for households across the region. The additional housing increased the number of households who could take advantage of the proximity to transit and the increase in local amenities. Assuming partial capitalization of accessibility and other amenities into housing prices and rents, local renters would likely benefit about $500 per year, depending on how much they value these amenities. The plan also had costs which tended to be outweighed by these benefits. The main costs were in the form of higher development impact fees and property taxes, which are borne by prospective buyers and all households respectively. Finally, the plan shifted households and jobs to locations with relatively high job and transit accessibility, leading to a reduction in vehicle miles traveled. In this paper we also compare results across cases.

References

In a changing climate, sea level rise and increasing precipitation intensify the threat of flooding in heavily populated coastal cities. Rising seas will amplify storm surges in more frequent, severe storms, triggering periodic major floods, and amplifying every high tide. At the same time, increasing heavy downpours may overwhelm the capacity of outdated drainage systems. Yet, in the U.S., aside from cities such as New York and New Orleans that have been galvanized by devastating storms, most cities are delaying large-scale, coordinated, infrastructural responses. They are still in a planning phase (Melillo, Richmond, and Yohe 2014). However, in many cities, flooding threatens their central waterfronts, districts that have a resurgent role in economic competitiveness as commercial anchors and magnets for residential and recreational development (Desfor et al. 2012; Hill 2013). Now, that very location dedicated to creating value as an economic center, a recreational destination, and a public amenity threatens value, directly exposing people, infrastructure, and property to the tangible threat of flooding.

As a continent with high per capita GDP, North America currently has the largest value of exposed assets globally, with 5 of the top 10 cities located in the U.S. In the U.S., flood defense levels are lower by per capita GDP than in other high-income nations, including England, Japan, and the Netherlands (Hallegatte et al. 2013). Within the most exposed American cities, Boston offers a unique case study for proactive adaptation, based in the lore of Hurricane Sandy’s near miss; had the storm peaked just 5.5 hours earlier, Boston would have experienced a 100-year flood event.

As of the last few years, this risk-related climate change data is beginning to influence the organizational landscape (Wittneben et al. 2012); faced with potential losses, commercial property management companies have begun to take note of impending flood risks. In addition, with increasing awareness of Boston’s vulnerability, the City has established partnerships with business and institutional actors to create more adaptation capacity. Some property management companies are now developing resilience strategies that operate at the individual property scale, however collective action is also being contemplated. Strategies at both the individual and collective scale are examined here for their impact on adaptation resources. At this early stage, private sector plans could either promote isolated resilience or be leveraged for broader adaptation; scrutiny at this critical juncture can render this a conscious decision rather than an unintended consequence.

References


Abstract Index #: 442
COMMERCIAL AND MULTIFAMILY TRANSIT PREMIUMS: A META-ANALYSIS
Abstract System ID#: 1043
Individual Paper
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While transit accessibility premiums have been rigorously studied at the local and regional level for over 40 years, drawing conclusions about premiums at a national scale requires a meta-analysis. Estimating effect size is a primary purpose of a meta-analysis. Effect size was calculated by Debrezion et al. (2007) using pre-2003 studies. We recently expanded and updated their work. From over 114 U.S. and Canada single family studies, we chose 53 studies published between 1976 and 2014 for a meta-analysis of single family transit premiums. We found that overall, U.S. and Canadian studies report premiums for single family houses near transit stations. Our weighted average discount is 2.3% in distance bands moving away from the transit station, and 0.17% for every 100 feet distance from the transit station in gradient studies. These results were supported by our hedonic model (Kittrell et. al., 2015).

This companion paper extends our earlier meta-analysis to multifamily housing, commercial, and vacant land uses. From previous studies, the highest premiums are for multifamily, commercial and vacant properties. Higher density properties have the highest potential to create the high density, mixed-use pedestrian environments we desire in TODs. The most recent meta-analysis for commercial and multifamily properties, published in 2007, uses a database of 57 studies published before 2003 (Debrezion et al., 2007). The study produced two models but did not supply effect sizes for individual studies, a major drawback. In this study, more advanced meta-analysis techniques and the inclusion of 10 new years of studies give us new insights, including much-needed commercial property information. With over 100 studies now available, a much larger sample of studies can be analyzed. We compute average effect sizes for 50+ commercial, multifamily and vacant land studies, model effect size in terms of place-specific variables, and unlike the 2007 meta-analysis, we will present premium estimates for all studies in the database.

References

Abstract Index #: 443
DRIVING FORCES OF THE TRANSITION OF LAND USE FROM VACANCY: DEFINING AND ASSESSING THE ROLE OF LOCAL PUBLIC AUTHORITIES
Abstract System ID#: 1057
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The housing market crash in 2007 triggered the establishment of land banks across the country. Run by governmental or nongovernmental authorities, land banks acquire, maintain, and dispose properties that are vacant, abandoned, or tax-delinquent. A large number of new home foreclosures with underwater mortgages sparked a national consciousness about foreclosed property and altered policy demands on urban land banks. Proposed to address the subprime mortgage crisis, the Housing and Economic Recovery Act of 2008 (HERA) expressed a renewal in federal interest in local forms of land banking (Schwarz, 2009). Most land banks are local agencies that exclusively reflect state statutes, which explains why they have undertaken federal subsidy programs. New land banks often receive a diverse mix of funding sources from local, regional, and federal level agencies.

The first generation of land banks in the United States emerged as a response to growing vacancy and disinvestment in aging urban cores. The goal of these authorities was to leverage land control in order to promote urban redevelopment while controlling for inflation (National Commission on Urban Problems 1968). Continued increases in vacancy and sustained population loss burdened existing land banks, exposing problems with prior legislation and management (Alexander, 2005). While greater awareness of vacant properties and urban land banks also led to academic research that better aligned with policy implications (Bowman & Pagano 2000; Dewer 2006), land use and planning literature paid less attention to evaluating performance of public land authorities. This paper seeks to understand the role of the public realm in the transition of land use from vacancy, including acquisition strategies and property portfolio management.

To analyze variations in the transition process of land use changes, this research used parcel-level land use data between 2008 and 2014 in the city of St. Louis. The ultimate goal of land bank authorities is to revitalize underused properties by returning them to productive use (Heins & Abdelazim, 2014). Local public authorities interpret “productive use” in a variety ways including housing construction, job creation, and community development. This spatio-temporal case study at the block level and at the neighborhood level allows for an examination of the physical outcomes of the shifts in land use patterns that are likely affected by local land use policies and public land authorities. The research will provide evidence of how public interventions play a role in urban land use dynamics through the strategies and plans they can implement.

References

Several States have adopted smart growth programs to reform local land use planning. The incentive based approach of state programs makes their success rely mainly on local government decisions to manage future growth. Local elected officials adopt land use policies that address community needs and problems, and respond to resident preferences. Therefore, it is important to understand elected officials’ perceptions of urban sprawl and growth issues, and to explore how these perceptions affect local applications of smart growth policies. Findings of that examination can help design more effective smart growth programs to combat urban sprawl.

The research paper addresses three major questions: how do elected officials perceive their city/town growth? what are their perceptions of urban sprawl? and how do these perceptions contribute to smart growth applications to reduce urban sprawl? The research focuses on cities/towns with 10,000 to less than 50,000 inhabitants that are located in the Eastern states. Based on previous studies, I examined three hypotheses to explore the research questions:

1) Elected officials’ perceptions of their city/town growth vary across communities. Most elected officials perceive their city/town growth as rapid.
2) Elected officials perceive urban sprawl as an important issue that should be addressed by local land use planning.
3) Elected officials’ perceptions of their city/town growth and concerns about urban sprawl affect applications of smart growth policies. When officials perceive growth as rapid and/or they are concerned with urban sprawl, they are more likely to adopt land use policies to manage their city/town growth.

To investigate the research questions, I conducted descriptive and multiple regression analyses. The statistical analysis relied on data collected from two mail surveys. First, I sent a questionnaire to key elected officials (Mayors or council chairs/presidents) to inquire about their perceptions of their city/town growth and the extent of their concerns about urban sprawl. Then, I mailed another questionnaire to directors of planning agencies of cities/towns whose elected officials replied to the first survey. The second survey seeks to collect data about smart growth policies adopted to reduce sprawl.

Afterwards, I conducted descriptive and multiple regression analyses to examine the research hypothesis. The dependent variable is an index expressing city/town applications of smart growth policies to reduce urban sprawl. The explanatory variables are elected officials’ perceptions of their city/town growth (rapid, about right, slow), and concerns about urban sprawl (important, unimportant). The independent variables include: city/town population, median household incomes, regional contexts (urban/rural), geographic locations (coastal/non-coastal), governmental forms (mayor-council, council-city manager, other), and locations in a state adopting a smart growth program.

Findings of the statistical analysis support the research hypotheses. They show significant effects of elected officials’ perceptions on city/town smart growth applications. Research findings help improve planning practices, and provide important implications that suggest a bottom-up approach to apply smart growth policies and combat urban sprawl.

References

Abstract Index #: 445

ARE PLANNERS’ PERCEPTIONS AND PLAN EVALUATIONS CONSISTENT? A COMPARATIVE STUDY OF LAND USE PLANNING TOOLS IN THE U.S. PACIFIC COAST

Abstract System ID#: 1082
Individual Paper

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Fifty-three percent of the entire U.S. population lives in coastal counties, yet the land area of coastal counties accounts for only 17 percent of the entire U.S. land area (Saginor & Ge, 2010). Critical environmental challenges, such as continuing sea level rise, coastal hazards, and coastal ecosystem segmentation, are endangering current and future coastal development. Nonetheless, coastal areas remain hotspots of urban growth and economic development.

In the densely populated Pacific coastal zones, the state coastal zone management (CZM) programs collaborated with other state and/or local governments and made improvements to land use planning and hazard mitigation. Local jurisdictions have utilized a variety of land use planning tools to shape the coastal living environment, including development policies and regulations, building standards, property acquisition programs, incentive tools, information dissemination strategies, critical and public facilities policies, financial tools, and private-sector initiatives (Ge, 2013; Tang et al., 2011).

Central Theme and Methodology

An important issue when considering land use planning tools is the evaluation of a plan’s quality in terms of how effectively these planning techniques are utilized to handle local growth problems. Tang et al. (2011) collected coastal zone land use plans from fifty-three Pacific coastal counties and measured the plan quality with a protocol of five plan components—factual basis, goals and objectives, policies, tools, and strategies, inter-organizational coordination, and implementation and monitoring (Brody, 2003; Tang, 2008). Although representing the linchpin of a plan, policies, tools, and strategies received the second lowest rating among all plan components. In comparison, Ge (2013) noted that plan making process is partially determined by planners’ perceptions of the attributes of the planning tools—effectiveness, cost, and implementation barriers—available for use in their jurisdictions. It surveyed urban planners from fifty-eight Pacific coastal counties and implied that they had moderately positive perceptions of all these planning tools which were rated effective and feasible but moderately costly.

There are some common findings across the two studies. A significant message is that jurisdictional characteristics were not associated with either the overall plan quality or the overall desirability indexes of planning tools, with one exception of planning agency’s capacity. However, one can expect more divergent results from the two interrelated studies after matching a CZM plan with a corresponding urban planner for a same coastal county. The thirty-five matched Pacific coastal counties provided the sample for the following comparative analyses on the consistencies of the two evaluative methods about land use planning tools.

First, given the two different conclusions about the overall utility of land use planning tools evaluated from the CZM plans (very low quality) and urban planners (moderately positive perceptions), a set of crosstabs will be constructed to seek the planning tools that are evaluated differently by the two methodologies regarding three tool attributes (i.e., effectiveness, cost, and implementation barriers) and two dimensions of plan components (i.e., breadth and depth). Second, after aggregating the county-level data to the state level, another series of comparative analyses will be conducted about these evaluative criteria across the five Pacific states. Last, using the overall plan quality score summed up from the five plan components as a proxy for the planning agencies’ commitment, comparisons will be made to identify any variation between the two studies.

Relevance to planning education, practice, or scholarship
The overarching goal for the comparisons is to better understand the gap between the planners’ preference of land use planning tools and the actual adoption of these tools in local CZM plans. This binary planning evaluation method could be further tested with other types of plans and generalized to other geographical areas.

References


Abstract Index #: 446

DOING RESEARCH FOR COMMUNITY BENEFIT

Abstract System ID#: 1128
Roundtable or Informal Discussion Session

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Researchers operating in universities are rewarded for pursuing research that is aimed at a national audience and employs rigorous methods. At the same time, as teachers and members of our communities, we are compelled to work on projects that matter to our communities. Often these are the sorts of projects we engage our students in through practicums or studio courses. They are applied, highly tied to local context and focused on their local impact rather than their generalizability. They may even help shape local policies or community initiatives, taking an active rather than neutral role in these efforts.

The participants in this roundtable will reflect on their experience doing community-focused research.

Organizing questions will include:
1) Challenges to/strategies for building and sustaining community partnerships
2) Advocating (vs evaluating) alternatives
3) Negotiating the tensions between student learning and research products
4) Dealing with the semester timeline
5) Student roles/leadership in projects
6) Institutional support/pitfalls

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A number of major cities in North America including New York and Chicago have implemented density bonus polices. This group includes Canadian cities such as Vancouver and Toronto. The application in Toronto, and the surrounding jurisdictions in Ontario are applied under Section 37 of the Ontario Planning Act. The longest running and greatest number of applications have been undertaken in the city of Toronto. More recently surrounding jurisdictions such as Vaughan, Burlington and Oakville have adopted Section 37 policy applications.

The approach applied in Toronto has been controversial in terms of equity and transparency. This has also led to concerns about how the policy may be applied in the surrounding jurisdictions. This in part has led to a Provincial government review of the application of this tool along, with a review of other exactions including Parkland dedication and development charges (impact fees).

The objective of this paper is to analyze the application of density bonuses in the City of Toronto in terms of equity, transparency and accountability in order to provide recommendations for changes that should be made to the current legislation and Provincial policy structure. An analysis will be undertaken of select wards in the city of Toronto in order to compare the application and outcomes of the use of the policy.

The analysis is based on the information that has been collected regarding all the section 37 agreements (density bonuses) that have been undertaken between 2000 and 2013. Despite the guidelines provided for the application of this policy in the City of Toronto, there are significant variations in the application as they are negotiated agreements with the local ward councillor playing a major role in the negotiations.

Based on the analysis of these applications in terms of equity, transparency and accountability, recommendations will be made regarding how the legislation and perhaps the city guidelines should be changed to improve the application of the density bonus policy. These recommendations will also be informed by practice in other jurisdictions including the Canadian applications in other Ontario jurisdictions and in Vancouver as well as other British Columbia jurisdictions.

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After fifty years of relentless outward suburban growth, U.S. urban development patterns may now, finally, be taking a more manageable and sustainable turn. At least that's the view being put forth by the a series of recent books and reports (Gallegher 2014, Ehrenhalt 2013, Leinberger 2009, U.S. EPA). Thanks to a combination financial overreach (home values in outlying U.S suburbs declined far faster during the Great Recession than they did in closer-in neighborhoods) and demographic trends (Millennials seem to prefer living and working in urban locations much more than prior generations), the era of unconstrained suburban sprawl may finally be at an end.

is this optimism supported by the data? To find out, I will use a series of established sprawl metrics and newly available federal and private data sources to determine whether and where sprawl is subsiding among the 200 largest U.S. metropolitan areas. These efforts will include:

1. Using 1990 and 2010 tract-based Census population and housing counts to construct population and housing unit density gradients; and to identify whether and where those gradients steepened between 1990 and 2010.

2. Using the 1992, 2001, and newly available 2011 National Land Cover Database (NLCD, a comprehensive GIS-based database of land cover and land use measured at the 30-meter level) to identify whether and where the rate of resource-to-urban land conversion at the urban fringe has slowed; and whether and where new urban development is becoming less far flung, and more spatially differentiated.

3. Using the a synthesized retail subset of ArcGIS' Business Analyst database, I will determine whether and where the form of new retail and commercial development is becoming more nodal and concentrated, and less dispersed and highway-oriented.

These measurements of 20-year changes in metropolitan development patterns will then be statistically compared to metropolitan population, demographic, and economic characteristics and changes; topography and other physical characteristics; local government fragmentation and spending patterns, an most importantly, regional and local-level changes in growth management practices. This latter analysis will hopefully let us identify whether and where local anti-sprawl programs and policies have been effective.

References

Since 1990, over 100 new major league sports facilities have been built across the US and Canada. Most large cities have grappled with the planning issues that accompany these large-scale and specialized developments. In turn, many city planners have engaged in debates over the principles of planning for sports-anchored districts,

Less well understood are the fates of more than 60 former facilities left in the wake of this sports construction boom. Stories about specific facilities have occasionally emerged, though mainly as cautionary tales. The Pontiac Silverdome, home of the NFL Detroit Lions from 1975 to 2002, made national news as it sat vacant for years and was finally sold by the City of Pontiac for $583,000 in 2009—a bargain by any reckoning. A similar situation has been unfolding in Houston, where debates over the future of the iconic Astrodome have fueled numerous planning and historic preservation visions—most recently, a ULI panel recommended a concept anchored by a large park—but implementation plans have been derailed by cost.

The purpose of this research is to examine the relationship between the fates of former major league sports facilities and the land use planning decisions that have shaped their outcomes. This is an important topic because the redevelopment of former ballparks, stadiums, and arenas offer important lessons about the challenges and opportunities of transforming these large-scale and specialized sites.

Moreover, since current planning initiatives centered on major league sports facilities pay little attention to the use of the site 30 years in the future (which is the average length of a major league facility lease), then it is reasonable to anticipate difficulties transitioning these sites for more traditional land uses and patterns of development when the time comes. Thus, this case serves to inform our understanding of how decisions made in the near-term to accommodate large-scale and specialized developments may turn out to compromise subsequent long-range redevelopment efforts.

In response to these issues, this paper begins by enumerating and classifying redevelopment outcomes for former major league facilities, giving context to a phenomenon that is not widely understood beyond the most high-profile cases, such as the Silverdome and the Astrodome. My data set includes captures the current use of all facilities replaced by the round of new facility construction between 1990 and 2015, which includes over 60 venues in total. My findings indicate four major categories: 1) facilities that are in still use for sports-oriented uses, 2) facilities that have been adapted for other uses, such as entertainment, 3) facilities that have been demolished and their sites redeveloped, and 4) facilities or sites that remain vacant.

Building on the narrative revealed through examining the full set of redevelopment outcomes, I describe in detail one particularly illustrative example from each category. Next, for each example I identify a set of planning decisions—including facility type, ownership structure, location, land use and site planning principles—that have shaped the present day use of these sites. Based on this evidence, I argue that host cities need to pay more attention to long-range issues of disposition and redevelopment when planning for major league sports facilities, adapting the lifecycle approach used in real estate asset management. I conclude by offering a set of recommendations for major league host cities as they plan for post-major league phase of large-scale sports facilities.

References
Residential development is primarily comprised of structural elements that include neighborhood design nearby amenities and ecological attributes. This paper examines the idea that the development process influences the character of the neighborhood—specifically that the real estate development process influences neighborhood turnover. While the structural components clearly set a framework for development, the development process expresses the character of the neighborhood in subtle messages conveyed through the market. Neighborhoods in the rapidly growing university town of College Station, Texas are analyzed in terms of neighborhood design, nearby amenities and landscape ecology components. In addition, residential property records are used to characterize the development process of each neighborhood in terms of the rate of development, development gaps, and current level of completion. The multivariate analysis indicates that the process of development influences neighborhood turnover rates which are critical in establishing stable neighborhoods and sustainable communities.

References

In this paper, I investigate China’s land quota markets, a recent land policy innovation that virtually transfers urbanization permission from the countryside to cities. To circumvent national government’s quota restrictions on converting agricultural land to urban land, local governments have created new land quotas by demolishing sparsely located farmhouses, and resettling peasants into high-density apartments. These quotas are then sold in new land quota markets to real estate developers.

I find that China’s land quota markets alter the traditional calculus of location and land use theory: the rural hinterlands have suddenly become valuable to urban land markets, particularly for industrial projects. In fact, the more distant a village is, the more likely it will be involved in land quota markets. Remoteness becomes a spatial advantage. These dramatic changes are the result of reconstructing property rights in land. The quotas traded on the market are a right to convert land use from rural to urban, separate from development rights to invest in specific properties. These institutional changes were initiated by recalibration of inter-governmental relationships: the Central Government delegates more autonomy to local governments and the municipality centralizes control over land from subordinating district and county governments.

The implications of the new land quota markets are profound and many. The quota markets further draw land resources away from the rural areas to urban areas, and reinforces the imbalances between big and small cities. Since these institutional changes are driven by public finance at its core, the scale of our analysis needs to be regional rather than at the scale of the city. Lastly, quota markets have mixed welfare impact on different types of peasants. For peasants on the urban fringe, the scale of land taking is likely to increase, displacing more
peasants than without the quota markets. For peasants in the deep rural areas, their housing conditions and access to infrastructure and public services are improved. However, their transition to urban lifestyle takes place before their transition to urban mode of production, therefore their long-term economic prospect is dismal.

Abstract Index #: 452
REGULATORY HYBRIDS: TRANSFER OF DEVELOPMENT RIGHTS (TDRS) IN MUMBAI AND NEW YORK
Abstract System ID#: 1259
Pre-organized Session: New Perspectives on the Regulation of Land

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Regulating density has long been a core land-use function of local governments. The traditional zoning instrument for density regulation is the FAR (floor area ratio, which specifies the maximum built up area permissible on a zoning lot). This paper analyzes a new form of density zoning – the transfer of development rights (TDR) – which promises to make zoning more flexible and market-oriented. The TDR program divides cities into subdistricts, and market players have more choice in allocating and trading development rights within these subdistricts. The earliest advocates of TDRs saw them as an innovative solution to protecting urban resources that are of collective value to society (such as parks, affordable housing, ecologically sensitive lands), but without disproportionately imposing the regulatory burdens of maintaining these resources on a few landowners. Since these low-density resources are situated in locations where the market demand for high-density use is high, TDRs allow landowners to recoup their unused development value through either using it on another eligible receiving site or selling it on the private market. More recent critics see TDRs as a new form of land financialization, where investors purchase air rights in anticipation of future gains. As air futures, TDRs become a financial instrument that is abstracted from the material, physical built environment below.

This paper compares TDRs in two bullish property markets in two different parts of the world: Mumbai and New York. It uses these two examples to compare and contrast the use of the same land-use instrument within two strikingly different institutional contexts. It asks how this new form of density zoning is redrawing the boundaries between public and private control over the urban built environment, and the implications of these shifts on this most basic of local government functions, land-use planning.

Abstract Index #: 453
USING LAND POLICY TO LOWER NATURAL HAZARD RISK
Abstract System ID#: 1271
Individual Paper

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When a major disaster causing death and extensive property loss occurs, victims, society and government ask: should people rebuild where they lived before? In most instances, the answer is yes, even though the costs may be high and the disaster risk may not be significantly reduced. The recent case of Super Storm Sandy in parts of the states of New York and New Jersey is an example of the “remain in place” at any economic or level of risk decision. There are, however, times when the answer is “no, let’s move to another place”. The voluntary residential red zone (RRZ) buy-out program in Christchurch, on New Zealand’s South Island is one such instance where moving to a safer place is the preferred government choice. Christchurch was subject to a series of earthquake for nearly two years. In this program residential properties are acquired by the national government, the buildings removed, people moved to other locations, and the risk of future losses were vastly decreased.

From June 2011 to September 2014 some 7,349 residential properties in the City of Christchurch designated as being in a Red Zone and subject to acquisition by the national government and 5,310 were bought and the houses on them demolished. The main questions explored in this paper are: What information and conditions led
to the national government making this multi-billion dollar land use decision, and what procedural actions were needed to implement the decision?

The Red Zone experience is driven by the existence of a government issued seismic insurance coverage for land damage underneath a dwelling. This, linked to the extensive damage to horizontal infrastructure (water, waste water, storm water and roadways) in the affected area led the government decision to ‘retreat’ from the area, rather than repair and rebuild. This is a case of geo-technical information being combined with long term risk exposure to drive land use policy.

No eminent domain procedure was used, but an equivalent process of no urban service provision led the property owners to sell to the government under one of two schemes: Option 1 a full buyout by government of both land and structures, an Option 2 a land sale to the national government and negotiation for house and contents valuation with insurance companies. The role of complex insurance procedures and that of the New Zealand High Court decisions are taken into consideration in understanding the underlying forces behind this event.

References

Abstract Index #: 454
LAND USE REGULATIONS AND HOUSING MARKETS IN THE HOUSTON-GALVESTON AREA: IS AN INDEX OF LAND USE REGULATIONS A VALID MEASURE?
Abstract System ID#: 1278
Individual Paper

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Affordability continues to be a major challenge for housing in America. Although high housing prices and the lack of real income growth are cited as the main factors behind the housing affordability problem, some studies suggest that stringent land use regulatory environments (here after referred to as LUREs) exacerbate the problem of affordable housing. Previous research recognizes that despite having higher average incomes, Metropolitan Statistical Areas (MSAs) with more stringent regulatory environments have a greater incidence of severe housing cost burden (Gyourko & Saiz, 2008).

Even though the problem of land use regulations and their effect on housing affordability is clearer in MSAs with stringent regulatory environments, this does not mean that it is not present in other less apparent regulatory stringent MSAs. Additionally, even if the effect is not clear in terms of affordable housing, other related problems such as exclusion and segregation could be strongly related to the type of land and development regulations in place (Quigley & Rosenthal 2005).

The attempt to study the overall effect of LUREs on housing markets is complex. Most of the studies attempting to measure the effect of the stringency of LUREs on housing markets have relied on the creation of a composite index that could capture the different dimensions explaining this effect. Nonetheless, any effort to create such an index have been conducted in LUREs known to be stringent (e.g. California, Florida, Massachusetts) which raises questions about the possible generalization of such results (Malpezzi 2009).
Texas is among the states whose metropolitan areas have been considered as not so stringent in terms of its LUREs (Pendall, Puentes et al. 2006). Empirical analysis looking at the overall role of local LUREs has not been fully addressed at the MSA level in Texas, thus, little is known about their impact on housing supply and, as a consequence, on housing affordability.

In response to this lack of evidence of the characteristics of local land use regulatory environments in Texas, this research created the first city-level index characterizing local regulatory environments for housing markets in the Houston-Galveston Area in order to test the hypothesis that this types of indices can be a valid measure to characterize regulatory environments for housing markets in other know not so stringent regulatory environments.

The index created proved to be a valid and reliable measure capable of taking into account the different aspects of the relationship between land use regulations and housing markets. Statistical procedures allowed the detection of a significant relationship between the stringency of local land use regulatory environments and local traits such as median family income, race distribution, poverty, and median housing values. After alternative indices were developed for a sensitivity and uncertainty analysis, the index proved to be a statistically robust measure against modifications on the different assumptions used for its creation. This new composite index introduced in this paper can help policy decision-makers more effectively engage the public in the design of their cities.

References


Abstract Index #: 455

PLANNING CINCINNATI: CONNECTING LAND USE POLICY TO DESIGN AND EQUITY?

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The City of Cincinnati’s planning history is bookended by its comprehensive plans of 1925 and 2012. Written nearly 100 years apart, they emerged in two radically different political contexts. One where planning was celebrated. The other where planning had been terminated and only recently reconstituted. Their underlying functions diverged. One was written to address rapid population growth. The other responding to decades of population decline.

The plans tell two important stories about trends in land use planning. First, compact urban form should be the development pattern of choice. The 2012 plan embraced a ‘good’ urbanist approach, building on some of the same concepts and priority places for growth as the 1925 plan while modifying recommendations related to single family homes. Design policy is clearly articulated.
The plans also share their ambivalence about social justice. On one hand each plan discusses the inequity the African American populations living in the city experience. Yet, neither makes strong advocacy positions. Three of the four neighborhoods called out in the 1925 as experiencing serious housing problems in African American neighborhoods, are some of the most distressed African American neighborhoods identified in the 2012 plan. In both the 1925 and 2012 plan, prioritization is placed on market rate housing, not producing quality units for the lowest earners.

In this paper, I trace how each plan conceptualizes land-use planning, and, in turn social equity and justice. Based on careful analysis of the plans and field research in Cincinnati during the writing of the 2012 plan, I argue the confidence in urban design does not carry over to planning for justice. This reflects the historic uneasiness of inserting a social justice agenda into planning, where physical and social issues are unnaturally separated. I do not believe this, at least in the 2012 plan, reflects a design dominant way of thinking. Rather, I think it reflects the ambivalence planners have about eradicating social inequity through land use policies.

References


The new law must address four areas of change: racial and cultural diversity; rising economic inequality; the decline of core cities and the rapid growth of suburbs; and the overarching challenge of climate change. I address each in turn.

In the 1960s the white population stood at 85 percent, while blacks and immigrants had reached their lowest percentages in history. Yet today whites are below 64 percent, foreign-born Americans are at near-record levels, and diversity of language, religion, and culture continues increasing. Cultural diversity shapes both heritage and public attitudes to its conservation. The NHPA says nothing on the subject, and although federal programs have made some strides in addressing diversity, a fundamental change of approach is needed.

In the 1960s poverty and economic inequality were declining: Americans looked forward to greater and more widely shared prosperity. Yet these trends reversed in the 1970s. Today a record number of Americans (over 46 million) are “officially” poor, and inequality is more pronounced than in any other advanced economy. For many Americans economic insecurity and the prospect of downward mobility have replaced optimism. These changes have reshaped the context for preservation. In the 1960s preservation programs could be designed with “average” Americans in mind. Yet today, as society becomes increasingly stratified into rich and poor (and as neighborhoods are increasingly segregated along economic lines), preservationists are faced with an
uncomfortable choice between serving the needs of an increasingly elite minority or not working at all. NHPA had nothing to say about inequality, poverty, or income segregation: today preservation needs “pro-poor” policies.

In the 1960s urban decline was already a problem. But today it has reached unimagined levels. Many American cities have been in decline for over half a century, some losing more than half their populations; some neighborhoods have suffered declines of over 70 percent. In the 1960s vacant and abandoned property was an almost unheard of problem, yet today it is the number one threat to the preservation of many cities and neighborhoods. Meanwhile, suburbs have burgeoned and changed dramatically: a symptom is big-box stores, which did not exist before 1962 yet now number in the tens of thousands. NHPA has no provisions for dealing with vacant and abandoned properties and no policies recognizing either the attractions or the problems of suburbs: preservation today urgently needs both.

Although the environmental movement made giant strides in the 1960s, climate change was not on the agenda: that’s because it did not yet exist as a policy concern. Indeed it was not until the 1970s that the evidence for climate change became irrefutable. Today it may be the gravest problem facing the nation—and preservation, and particularly mass retrofit, is a critically important part of the solution. NHPA makes no reference to climate or to mass retrofit: preservation today urgently needs a national policy for both.

In each of these four areas, the degree of change in half a century has been little short of astounding. Change has fundamentally altered the challenges and opportunities for preservation. A point-by-point comparison of conditions then and now, together with an analysis of how change has reshaped the conditions for preservation, demonstrates the need for a new law and identifies the major policy areas it must address.

References
- There are several historical studies of American preservation law (including those mentioned here), but there is no publication on the subject of this talk: the need for and potential contents of a new national preservation law.

Abstract Index #: 457
ENABLING COMMUNITY ACTION: RESILIENCY CLIMATE CHANGE COOPERATIVE PROJECT
Abstract System ID#: 1340
Poster

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The Problem
In spite of large national efforts to reduce the impacts and costs of natural disasters, average annual federal expenditures to fund rebuilding from catastrophic and chronic losses have been rising faster than either population or gross national product (Gall et al. 2011). This trend will likely accelerate as the destructive potential of these events increases due to climate change and sea-level rise. Living more sustainably in coastal areas is one of the grand challenges of the 21st century (NRC 2014). It necessitates a fundamental shift away from the current reactive, piecemeal and disjointed approach to managing coastal hazards towards a more proactive,
integrated systems approach aimed at enhancing community resilience. As defined by the National Research Council (NRC), resilience is “the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events” (NRC 2012, p1).

A working group at the Institute for Sustainable Coastal Communities, Texas A&M University has initiated a multiyear collaborative research and engagement venture called Resiliency Climate Change Cooperative Project. The RCCCP is creating a fundamentally different way to identify and tackle critical disaster resiliency and climate change challenges that threaten communities around the world. The project has brought together faculty and students from urban planning and landscape architecture, the physical and social sciences, public health and engineering to collect new data and synthesize existing information on how coastal social and physical systems work.

Core Goals
- To expand knowledge about how the emerging triple threat (storm surge, stormwater runoff flooding, and climate change) influences coastal community hazard vulnerability.
- To create long-term change through co-learning between researchers and vulnerable populations around strategic community needs, and support of community capacity to actualize their own resilience.

Methods
A demonstration project was initiated in February 2013 in two inner city neighborhoods in the Sims Bayou watershed in Houston. These neighborhoods have a history of environmental justice and disaster vulnerability issues. A central tenant of data collection and analysis activities is the engagement of local people as active contributors, rather than have hazards experts do the work for (and on) local people. Core activities include:

- Scientific and technical research focused on modeling future hazards (storm surge, inland runoff and climate), and identifying the physical vulnerability (number, value and age of structures) and social vulnerability of subpopulations (poverty, race, age).
- Citizen science research focused on participatory mapping, water quality testing, stormwater drainage inspection, and rainfall collection measures.
- Development of a planning support system (PSS) to support data integration and allow users to develop customized scenarios (based on selecting climate, development and infrastructure scenarios of interest to them).

Preliminary Results
Preliminary results derived from the modeling:
- Rainfall will likely be a few inches less in 50 years, but rainfall events and flooding will be more severe.
- Areas exposed to flooding from sea level rise in 2100 are projected to be two times greater then area exposed by the current 100-year floodplain.
- Based on current population in Sims Bayou, the population exposed to flooding from sea level rise in 2100 would double compared to population living in the 100-year floodplain.
- Changes in projected future development would widen floodplains in the downstream inner city neighborhoods.

Next steps:
- Citizen science data collection activities will be conducted during the summer 2015 to supplement and revise modeling results.
- A planning support system will be built based on our work in Houston, but designed to be applicable for community engagement throughout the Atlantic and Gulf coasts.

References
This paper will look at Third Ward and the 288 Corridor for its past perspective and the metro rail lines for the current and future. The development of transportation infrastructure in urban America has for the most part facilitated significant economic development. The elite have been a major influence in shaping the growth of the commercial sector in most communities on the one hand while ignoring social and economic decay in the wake of major highway projects. Since the 1970’s and 1980’s planners have entered the arena promoting collaborative and inclusion of those affected by public decisions and choices. The decision to build or not to build are often made on economic lines while the principle of collaboration (Schorr, 1997), inclusion and just outcomes (Young, 2000) are non-existent or perchance.

The emphasis on expanding transportation routes facilitating connection to the Central Business District (CBD) core has come at a significant cost to the businesses and residents, due to eminent domain actions, displaced community nodes, and overall disenfranchisement. The disruption and taking of private property may fall into the equity and economy conflict conundrum as described by Godschalk (2004). The EPA requires all projects utilizing federal funds to take into consideration the environmental impact, the term strategic environmental assessment provided the basis for making public choices that had land use impacts (Fischer & Seaton, 2002). Do those guidelines provide an adequate frame work to ensure that the actual cost, conflicts, and long term community destabilizes are considered and adequately mitigated?

In this paper, we will address the problem by using a mixed method approach in data collection and analysis. The qualitative data analysis will demonstrate the area of concern before, during, and after the completion of State Highway 288. The quantitative data collection and analysis will utilize census socio demographic information over the same period and project an economic status if the highway never intruded. Additionally the paper will examine the institutional sectors relationships in possible decision and potential policy actions within the frame of the current and proposed transportation projects and the likely impacts on the Third Ward community Rodriguez (2012).

Finally the study will incorporate the social determinants pointed out by Bullard (1983) and align those with the principles of strategic environmental assessment as an instrument of deliberative democracy in decision making and see how economic pressures may have reigned at the detriment of some other just outcomes. The study will demonstrate actions and opportunities for change and for further research that can foster the goals of social equity and just outcomes.

References

- Fischer, T. B., & Seaton, K. (2002). Strategic environmental assessment: Effective planning instrument or lost concept? Planning Practice & Research, 17, 31-44
Coastal cities are particularly vulnerable to climate change because of sea level rise, flooding, and rapid urbanization. City planners have an opportunity to act as agents of change to build resilience within their coastal city to respond to the changing climate. Since planners operate within a wider urban climate governance system, our research looks at how planners can work effectively with boundary organizations, such as the International Council for Local Environmental Initiatives (ICLEI) and the Adaptation to Climate Change Team (ACT), to foster adaptation action in a coastal megacity, such as Vancouver, Canada.

Our research builds off of urban climate governance research (Anguelovski & Carmin, 2011; Burch, 2010) to focus on how partnerships with boundary organizations influence adaptation planning and implementation within cities. At the root of effective urban climate governance is the integration of science and policy (Tribbia & Moser, 2008). Partnerships with boundary organizations offer a governance approach that disseminates knowledge, builds capacity, and engages more participants in the adaptation planning process (Bauer & Steurer, 2013). Our research focuses on how to improve partnerships and increase the planner’s capacity to implement effective adaptation options.

Our paper uses a case study approach, focusing on four influential boundary organizations in Vancouver, British Columbia. We chose a case study approach to address an empirical gap in the literature (Harmon, Taylor, & Lane, 2014) and provide insight on how these partnerships operate in practice. Vancouver was chosen because of its vulnerability to climate change and its recent climate change adaptation strategy. We conducted 30 semi-structured interviews with urban planners and four focus groups with practitioners across four adaptation boundary organizations.

Our results have direct application for planners and academics. The empirical case study on Vancouver helps illustrate how to establish effective partnerships that foster adaptation action. Our research will also inform academics how to prepare future city planners to build adaptive cities with strong urban climate governance systems.

References
In the current century the world’s population will age significantly. How can neighborhoods be successfully re-planned and redesigned to support this different population? This paper reviews current understandings and proposes reframing understandings of the relationships between people, place, and health in two areas.

1. As they age people undergo physical and psychological changes although changes in life expectancies, life histories, and medical treatments in recent and coming decades make the character of those changes something of a moving target. Many of these changes are caused by and affect biology, behaviors, and social networks. But a number are influenced by the planning-scale environments including exposures to toxics and irritants, opportunities to connect to resources needed for health, and supports for healthy behaviors. I propose a refined framework for understanding the character of these relationships and how they vary over the lifespan.

2. Household structure is also changing and will continue to evolve. Fewer people are marrying, many of the others will divorce or be widowed in later life. Families are smaller and even in places where there is a tradition of caring for elders, substantially longer life spans make this more of a burden for both careers and older people. The 4-2-1 situation talked about in China—four grandparents, two parents, one child—reflects a situation of concern far beyond China. By 2030 single person households will be one third to one half of households in countries such as Japan, England, Germany, and France in part due to aging (OECD 2011; Forsyth 2014). While there are benefits of reduced populations in terms of environmental pressures, this new household landscape poses planning challenges. The second part of the paper clarifies these challenges in terms of major planning domains—land use, transportation, urban design, housing, and community development.

Drawing on a survey of academic, professional, and popular reports of international experience, particularly in those places dealing with the rise of small households, the second half of the paper explores new directions for retrofitting and developing neighborhoods to meet these challenges. These include: (a) strategies already in use, (b) near term possibilities, and (c) more speculative options for both high and low/medium income societies. It focuses on strategies for physical and social organization of neighborhoods and districts within the domain of urban planning and community development. As well as more typical planning approaches (e.g. allowing a wider variety of housing types), this may require new or adapted forms of organizations (e.g. service coops) and supports for technologies (e.g. driverless vehicles).

References

RURAL COMMUNITIES TO GROWNYC'S GREENMARKETS: SPATIAL ANALYSIS TO UNDERSTAND URBAN-RURAL LINKAGES

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Since 2009 the US Department of Agriculture has supported over 2,600 local food initiatives (USDA, 2013). These initiatives are primarily concentrated in urban areas where there is a sizable, growing market for local foods. They are widely understood to support communities, economies, and farmers; however, there have been few, if any, studies that holistically and empirically assess the impacts of farmers markets on both urban and rural communities. With a grant from the USDA Agricultural and Food Initiative program this interdisciplinary research project brings together qualitative, economic, and spatial analysis to investigate three promising areas of research on farmers' markets and regional economic development: (1) strengthened rural-urban linkages, (2) economic and community impacts of the shift to local foods (re-localization), and (3) measuring wealth creation in seven areas – Intellectual, Individual, Social, Financial, Political, Built, and Natural. This research investigates: What are the economic and social impacts of urban farmers markets on the region, on urban neighborhoods, and in the rural communities that are linked to them?

This paper focuses on mapping and spatial analysis used to examine rural-urban linkages and metrics associated with the seven wealth creation domains. The research is focused on understanding impacts around case study rural communities and a subset of the 54 GrowNYC Greenmarkets in New York City. GrowNYC is a nonprofit that focuses on environmental stewardship through farmer's markets, educational programs, community gardens, and recycling programs.

This research crosses state boundaries and rural/urban divides to holistically understand relationships between producers and farmer's markets and the communities that have evolved as a result of this relationship.

References
Operating within these assumptions, low-income families have no margin for error. In this context, government programs set up an impressive facade that does not address the true costs of poverty.

Food insecurity is one of these costs. Households with incomes below 185% of the poverty threshold are most likely to struggle with hunger because of limited access to nutritionally adequate, safe, and acceptable foods (Anderson 1990; Coleman-Jensen et al. 2011). Hunger adds a tremendous social burden to America; in 2007—before the economic recession increased food insecurity—the cost burden of hunger was calculated to be over $90 billion a year. This figure included $67 billion dollars caused by illness and psychological dysfunction and $9 billion created by less education and lowered productivity (Brown et al. 2007). Even though these burdens affect society at large, they are most acutely felt by the individuals and households living in poverty.

To address the costs of hunger, planners have implemented policy solutions designed to increase access to healthy food. Between 2000 and 2014 nearly 200 Food Policy Councils were established in the United States. Some of the policies implemented focus on altering the food retail environment in low-income neighborhoods.

To compare areas with and without Food Policy Councils, this paper utilizes a spatial panel econometric model for counties in the continental United States.

The model uses longitudinal data from the Supplemental Nutrition Assistance Program (SNAP). SNAP has a direct impact on the health, wellbeing, and the buying power of 1 in 7 Americans. The model uses publicly available geocoded data on SNAP benefits and redemptions, retail locations, and commuting patterns. The model explicitly examines the consequences of commuting patterns and retail markets, both local and in surrounding counties, for SNAP redemption. The model provides a basis for comparing changes in SNAP redemption patterns before and after food access policies are implemented.

Preliminary findings show that mobility and store type are important controls for predicting SNAP redemptions. Results from this paper will highlight how retail market environments and commuting patterns can influence redemption patterns of SNAP participants. The factors identified in this research that influence redemption patterns will be suggestive of and have implications for policies that might enhance SNAP redemption. Future research can then employ similar research strategies to determine whether or not such policies indeed had an effect on SNAP redemption patterns.

References
Immigrant laborers significantly contribute to the U.S. agricultural sector. In 2010, more than 50% of the laborers hired in the agriculture industry were foreign born (Rosson 2012). However, immigrant farm laborers are at great risks for developing nutritional (Kowalski et al. 1999) and occupational (McCurdy et al. 2003) health-related problems. A handful of studies quantified the level of food insecurity among immigrant farm laborers reporting high rates of food insecurity associated with hunger, especially among undocumented immigrant farm workers (Quandt et al. 2004). Access to healthy and affordable food is an even greater challenge for those immigrant farm laborers who reside in informal rural settlements or colonias along the border of U.S. - Mexico. Colonias are substandard residential areas with limited access to water, sewage, services and transportation. Colonias’ residents have higher rates of diabetes, obesity and chronic disease as well as an alarming level of food insecurity (Sharkey et al. 2011).

While these studies are crucial in shedding light on the unspoken reality of the U.S. farm laborers’ access to food, they typically fall short in providing feasible recommendations for policy makers to tackle this issue. Lack of study and/or action in regard to food insecurity among immigrant farm laborers can be explained by the complex nature of the problem. This “wicked problem” created by the complex and controversial political nature of immigration reform leaves researchers and policy makers reluctant to take a proactive approach in addressing the food needs of the very people who provide the nation’s food supply. Thus, this research focuses on the capacity of local government in addressing the issue of food insecurity among immigrant farm laborers by relying on planning strategies and policies that can foster a community food system that serves and benefits this population. Addressing issues tied to immigration laws and policies are typically conceived as federal government responsibility, whereas this research provides a unique opportunity to explore innovative local government interventions to tackle food insecurity among immigrant farm laborers.

This study employs a mixed-method approach to examine the ways in which local government can engage in tackling food insecurity among immigrant farm laborers residing in colonias at the border of New Mexico – Mexico (Dona Ana County, NM). This study aims to 1) explore challenges and barriers faced by the food system stakeholders – local government, wholesalers/distributors/producers, and consumers- in providing/accessing affordable and healthy foods in the most underserved informal immigrant settlements , and 2) provide planning and public policy responses as a framework for the local government to strengthen the community food system. The analysis of quantitative data derived from the National Workers Survey, USDA Food Environment Atlas, and USDA Agricultural Census helps to provide an overview of the extent of the problem as well as complementing the design of the interview questionnaire. The study also relies on qualitative data including but not limited to interviews with key stakeholders and field observations to provide an in-depth analysis of the current challenges and opportunities in the community food system. Utilizing the qualitative and quantitative data, the study provides an inductive analysis of local governments’ capacity in tackling the extreme disconnections between producers and consumers in colonias. We expect our findings, grounded in the community’s opportunities, to provide implications for planning and public policy interventions that simultaneously increase agricultural viability and food security among immigrant farm laborers.

References
Neighborhoods that are underserved by supermarkets, or “food deserts,” often have corresponding high rates of diet-related disease, low-income and minority populations, and have drawn attention from community development planners and policymakers [1]. Among the most capital-intensive of interventions to improve food access are supermarket development programs, which attract new stores with a variety of financing mechanisms, including low-interest loans, tax credits, grants, and other incentives. Recent studies have sought to measure the health effects of new stores, partially in response earlier research and advocacy that suggested low food access was related to poor health [2-3].

Existing health evaluations focus on downstream behavior changes, including consumption of fruits and vegetables and obesity status. However, a causal model suggests that for new supermarkets to improve the health of individuals (change in food choice), they must first be utilized for food shopping (change in store choice). Low-income residents often choose supermarkets as their primary stores, even when they must travel outside of their neighborhood to access them, though we also understand this choice of store to be complex and multidimensional [4]. Thus, there are critical reasons for planners, policymakers, and researchers to avoid assumptions about store adoption and instead explore how this change in shopping behavior occurs.

Recent geospatial research using data from the Supplemental Nutrition Assistance Program (SNAP, formerly food stamps), presents opportunities for this exploration [5]. SNAP exists as a system of approved food retailers who can accept benefits, and program participants, who redeem benefits via electronic card payment (akin to credit/debit card transactions). This study examines if, how, and when new supermarkets in food deserts are adopted by low-income shoppers. Three research questions guide this inquiry:

1. Do new stores capture food dollars from low-income households that were formerly spent elsewhere?
2. Given that food expenditures are relatively constant, what effect do new stores have on existing stores in adjacent areas?
3. Are project and neighborhood-level variables related to the relative rate and strength of new store adoption?

Two main SNAP datasets are employed: 1) addresses of all approved SNAP retailers, and 2) ZIP-level amounts of SNAP redemption; both are annual records from 2000 to the present. In the absence of proprietary retailer data, these records offer the best possible estimate of local behavior change caused by new store development across multiple locations. From a comprehensive review of media, reports, and other documents, and interviews with industry experts, a database of food desert developments was assembled. Tract-level data from the American Community Survey was used to estimate the amount of SNAP benefits potentially available in each area. To focus the study, three states are examined: California, Pennsylvania, and New Jersey. These states are significant in terms of number of projects (33% of all completed supermarkets), and their highly-replicated models of financing new store development.

In a preliminary sense, several spatial trends are evident: first, many new stores yield increases in the ZIP-level amount of SNAP dollars redeemed annually; second, the increases seen in some neighborhoods are not seen in others; and third, increases in certain neighborhoods appear to affect redemption in others. Three approaches will quantify these trends:
1. **Difference-in-Difference Analysis (behavior change).** Determine if rise in SNAP redemption is significantly greater in areas with new stores (treatment), controlling for other neighborhood factors.

2. **Network Analysis (impact on neighboring areas).** Measure the extent to which one area's change in in SNAP redemption is explained by changes observed in neighboring areas.

3. **Regression with Spatially-Lagged Dependent Variable (correlates of success).** Determine significant neighborhood/project characteristics, given geographic interactions and clustering that exists in SNAP redemption.

**References**


**Abstract Index #: 465**

**MOBILITY FOR THE AGING: A STUDY IN EAST LANSING, MICHIGAN**

**Abstract System ID#: 190**

Pre-organized Session: Re-creating Communities for Optimal Aging

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Concerns for the aging population go beyond just health issues. They transcend to financial stability, quality of life and mobility issues as well. An upswing in the trend of aging in place brings new meaning to mobility for this population cohort. Relatively active lifestyles of those seeking to age in place mean the transportation infrastructure needs to continue to evolve to meet the unique needs of this group. Not only do health providers have a responsibility in ascertaining mobility concerns of their older patients, but cities and transit agencies also need to do their part in planning for safe and practical mobility and accessibility for their aging resident base. This study looks at the spatial distribution of the elderly population in the city of East Lansing, Michigan and accesses the infrastructure that encourages or hampers their mobility and accessibility. We look at the transportation infrastructure available to those aging in place and those that are in retirement or assisted living facilities in East Lansing, while distinguishing between the young-elderly (aged 65 years to 75 years) and old-elderly (aged over 75 years) population. The study uncovers nuances that accompany the efforts of specialized public transportation and conventional transportation as they cater to the aging population. Planning to have the right infrastructure in place to enable the aging population to maintain their quality of life and activities is considered to be a basic necessity in their overall health assessment.

**References**


Abstract Index #: 466

**FOOD SYSTEM PLANNING: DO RURAL AREAS DESERVE SPECIAL ATTENTION?**

Roundtable or Informal Discussion Session

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We invite attendees to a conversation about rurality in food system planning. Rural food system planning has not received the same attention as urban food system planning. While a small but steady scholarly leadership has focused on rural areas, mainstream planning scholars and practitioners have not given rural areas the attention needed despite calls for increased consideration (Frank and Reiss, 2014; White, 2014; Daniels and Lapping, 1996). When rural areas are considered, they are often treated as “downscaled cities,” “cities in waiting,” or simply a blank canvas on which to impose particular sectoral agendas (Frank and Reiss, 2014, pg. 386).

In this roundtable, panelists will discuss experiences of working with and studying in rural communities on across the United States. In particular, we will discuss parameters that create difference in rural food systems, including governance and institutional arrangements, civic engagement and community partnerships, food system infrastructure and markets, and community capitals and capacity that impact the planning efforts and opportunity in the food system. Join this roundtable to further develop a research agenda on rural food system planning.

References


Abstract Index #: 467

**PERCEPTIONS OF NEIGHBORHOOD WALK-FRIENDLINESS AND WALKING AMONG OLDER ADULTS IN A MIDSIZED US CITY: SUBURBAN AND MORE URBAN NEIGHBORHOODS COMPARED**

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If current trends continue, the population of older adults in the US will continue to grow most rapidly in suburban locations; such areas tend to have few if any destinations within walking distance of homes. Whether and in what locations to plan at the neighborhood level for more opportunities for walking as part of daily routines therefore are important issues as US cities and counties consider their role in enabling optimal aging. Physical activity is a critical dimension of optimal aging and its health benefits are well documented; walking is the type of physical activity that is most common among older adults. To help guide where to locate investments, a better understanding is needed of older adults’ walking behaviors and perceptions of walk-friendliness in suburban
compared to other neighborhood environments, and in mid-sized cities in particular as these have been less studied.

This study focuses on a mid-sized, low density city, and asks first whether older residents of Neighborhood Naturally Occurring Retirement Communities (NNORCs) in suburban, single-family residential neighborhoods report walking less, or getting out of the house less, than residents of more urban NNORCs, and whether they tend to walk for different purposes. NORCs are communities that were not designed for older people, but rather that evolve over time to include a relatively large concentration of older residents. Second, this study asks how different are the behaviors suburban residents report compared to those living in single-family, medium-density housing developments in more rural parts of the county.

And third, it asks to what extent these behaviors depend on the perceived walk-friendliness of the neighborhood, and perceived ability to reach common destinations on foot, and to what extent they depend on the importance residents place on being able to walk to local destinations or on having close ties with neighbors. And lastly, it examines the extent to which age, health status, or stage in the transition away from driving make a difference.

The most consistent finding of the small number of empirical studies of the social and built environment and walking among older adults, is that availability of commercial destinations within walking distance from home is significantly associated with higher walking activity (Kerr, Rosenberg, and Frank 2012; Yen, Michael and Perdue 2009). However, one study of older adults in Portland, Oregon found that this was only true for survey participants who indicated at least some walking activity (Nagel et al., 2008). Furthermore, when disaggregated by purpose of the walking activity, another study of older women in Portland found that although urban women walked more to reach destinations than did suburban women, the frequency of recreational walking was similar (Patterson and Chapman 2004).

This paper is based on a household survey of 445 adults aged 65 years or older and living in a Neighborhood NORC in Leon County, Florida, including the City of Tallahassee. Households headed by older adults were identified using voter registration lists and linked to census blockgroups using an address-matching algorithm. Sampling was carried out within strata, proportionate to size; strata were defined by a measure of neighborhood built environment type created for the project (Aurand, Miles & Usher, 2014), and median household income of the blockgroup. In-person interviews were carried out between January and August 2013. Statistical analyses form the basis of the investigation of research questions.

Analyses are ongoing, preliminary findings indicate that on a scale summarizing responses to a series of items measuring perceived walk-friendliness of the neighborhood environment, there is no significant difference in the scores of residents of neighborhoods classified as suburban single-family residential and those of residents of urban, mixed residential or urban commercial neighborhoods. The latter two groups however perceive that they have a significantly higher number of destinations they can walk to from home “without much trouble” compared to suburban residents.

References
Urban agriculture is a dynamic process that can grow or decline. While urban agriculture programs have gained in popularity over the previous decade, farming within cities remains vulnerable due to land tenure (Castillo, Winkle, Krauss, Turkewitz, Silva, & Heinemann, 2013), community resistance (Covert & Morales, 2014), and competition with other uses for land considered “sustainable,” such as redevelopment (Lovell, 2010). The existing literature on urban agriculture has focused primarily on case studies of successful programs; these studies promote land preservation and acquisition (Hodgson, Campbell & Bailkey, 2011), well-defined regulations and policies (Hodgson, et al., 2011; Mukherji & Morales, 2010), education and training (Bleasedale, Crouch & Harlan, 2011) and metropolitan coordination (Krones & Edelson, 2011). However, the extent urban agriculture has grown or declined on a national scale and the major reasons behind these trends receive little attention in current research. The degree cities follow prescribed policies and practices also warrants further study. This study explored these issues through a survey of planning directors of cities within the top 300 Metropolitan Statistical Areas of the United States. This research found that most cities incorporated urban agriculture in planning policies and regulated urban agriculture through zoning and parks and recreation regulations. Most responding cities experienced growth in urban agriculture to a modest degree in acreage and number of projects; however, cities reporting a decline in urban agriculture reported a more striking loss of urban farming sites. Land conversion ranked first among impediments to urban agriculture with few cities pursuing programs for preservation and acquisition of agricultural land. Urban agriculture as a public use also ranked lower in priority to other municipal projects. Respondents also reported lack of entrepreneurial and farming expertise as another impediment. Further, there was little coordination of municipal urban agriculture programs with adjacent jurisdictions. The findings of this study call for more urban farming training and education programs, improved coordination between local jurisdictions and non-profits, and regional approaches to secure farmland in urban and peri-urban areas.

References

Despite of their close connection in the past, today the domains of urban planning and public health have grown apart. Health and environmental issues have become the responsibility of health and environmental departments, with specific professions and expertise in control, while planning departments remain mainly focused on geographical or architectural approaches of space and time. This disconnection, resembling the political structure with its specialized bureaucracies, hinders the inclusion of crosscutting issues like health in spatial planning and policy. At best, in most Western countries the concerns about public health enter the planning process in a final stage, through the more or less obligatory environmental impact assessment process, executed by specialized experts and coordinated by the environmental department. Moreover this environmental assessment process is based on a system of more or less generic environmental norms and regulations, with thresholds for an array of environmental risks. Despite of its unquestioned achievements in preventing serious environmental conflicts, this institutionalization of environmental health criteria in formal laws and regulations seems to have difficulties to deal with the growing awareness of environmental impacts and the increasing empowerment and engagement of citizens, leading to continuing distrust and conflict between citizens and the government.

The paper aims to move beyond this lock-in and explores ideas for a more context-dependent and adaptive urban planning perspective regarding environmental health. The absence of a detailed policy framework to reconnect both disciplines leads to developing a matrix of planning management approaches, that builds on recent ideas of co-evolutionary and adaptive planning. Central to the matrix is the expansion of the current institutional management approaches to environmental health conflicts with additional approaches that capture the self-organizing capacity and expertise of grassroots initiatives. At the same time the combination of institutional versus actor-related approaches allows for adaptive planning solutions. Thereto a flexible attitude of the government is needed to look beyond the strict environmental regulations and rigid procedures.

To verify how these academic and theoretical insights could be implemented to solve urban environmental health conflicts, a case study research trajectory is devised in the city of Ghent (Belgium). The methods to detect and analyze possible conflicts reflect recent approaches in environmental justice research. First, a GIS analysis is carried out to compare the distribution of environmental impacts (air pollution and noise) with the distribution of vulnerability (socio-economic characteristics) and responsibility (e.g. car ownership and modal choice) indicators, allowing the detection of spatial inequalities. Second, these inequalities are examined thoroughly in case studies, where more detailed information about the context is assembled, including bottom-up, subjective aspects, and the processes behind the inequalities. Consequently in a third part the situation is evaluated, and a redevelopment track can be devised making use of a combination of the four planning management approaches. Based on the provisional results of the ongoing case study the paper will formulate recommendations how the use of the matrix could practically support a more central place for health in urban planning.

References

AGING IN PLACE: ANALYZING HOMEOWNER CHARACTERISTICS, MORTGAGE STATUS, AND PROPERTY VALUES IN MATURE AND DEVELOPING SUBURBS
Abstract System ID#: 316
Pre-organized Session: Re-creating Communities for Optimal Aging

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In 2012, 14 percent of Americans were seniors, i.e., age 65 and over, and by 2030, an estimated 20 percent of Americans will be in this age group. The majority of seniors want to age in place and the majority owns a home (Harrell, Lynott, Guzman, & Lampkin, 2014), typically in the suburbs. Some works have been published on aging in place, focusing on people (Pfeiffer, forthcoming), while much less has been published focusing on place (Beck Pooley, 2015). The goal of this manuscript is to analyze demographic, socioeconomic and housing characteristics of neighborhoods, in particular (a) the proportion of home owning seniors, (b) the proportion of homeowners who moved into their housing unit before 1979, (c) the proportion of homeowners without a mortgage, and (d) the median value of the owner-occupied housing unit, differentiating by central city, mature suburbs (i.e., median year housing unit built 1969 or earlier), and developing suburbs (i.e., median year housing unit built 1970 or later).

The geography of this paper is the 100 largest U.S. Metropolitan Statistical Areas (MSAs). The unit of observation is the Census tract. The data set is the American Community Survey (ACS) 2009-2013. The variables of particular interest are (a) Tenure by Age of Householder (B25007; subset: owner occupied housing unit: householder 65 to 74 years, householder 75 to 84 years, householder 85 years and over); (b) Tenure by Year Household Moved Into Unit by Decade (B25038; subset: owners; moved in 1969 or earlier; moved in 1970 to 1979); (c) Mortgage Status by Age of Householder (B25027; subsets: housing units without a mortgage, housing units with a mortgage; householder 65 to 74 years; householder 75 years and over); and (d) Median Value Owner-Occupied Housing Unit (B25077). The methods are descriptive statistics and regression analyses (dependent variable: median value owner-occupied housing unit; independent variables: select demographic, socioeconomic, and housing characteristics).

Preliminary results indicate that mature suburbs in select MSAs in the Northeast and in the Midwest have a high proportion of homeowners who moved in 1969 or earlier and have a high proportion of homeowners without a mortgage. While long-term residency is positive for community stability and while the lack of a mortgage is positive for the amount of disposable income available, the housing stock may be in need of repairs, indicating the need for public policies (Kochera, Straight, & Guterbock, 2005: Lipman, Lubell, & Salomon, 2012).

References
Los Angeles was founded over an underground sea of oil, which sometimes seeps to the surface, as in the dinosaur traps of the La Brea Tar Pits, but other times are pumped to the surface near schoolyards and residential communities. Few people knew of the oil field hidden away in the University Park neighborhood of South Los Angeles until production suddenly increased by 400% between 2009 and 2010. Approximately 270 nuisance complaints have been logged since 2010 by local stakeholders who experienced foul odors, headaches, nausea, nosebleeds and other health conditions.

The University Park neighborhood, near the University of Southern California, is a densely populated community primarily comprised of low-income, people of color. Within less than a few hundred feet of the neighborhood oil facility are hundreds of homes, a number of schools, including a school for children with special needs, two parks, and a University of predominately young women. The eruption of complaints created a growing sentiment among community residents, advocacy organizations and some elected officials that oil extraction is an incompatible use with the surrounding neighborhood.

The recent rise in the cost of oil prompted many previously dormant or low-producing urban oil wells to substantially and rapidly increase their oil production. As in the case of University Park, residential and commercial neighborhoods developed around oil facilities during their periods of dormancy and low production, contributing to problems of incompatible land-uses today. The chemicals and processes used in the oil facility in University Park have been linked to a myriad of health risks for the surrounding neighborhoods.

Most planning literature discusses the benefits of designing land-use policy to avoid incompatible land-uses in the future. However, little planning research focuses on strategies to ameliorate conflicts arising from existing or newly erupting land-use incompatibility. Moreover, although some studies depict the role of community organizing in promoting environmental justice for communities of color, fewer studies have been conducted on the role of community organizing in initiating participatory processes used to enforce land-use and other regulatory policies that mitigate the disproportionate health burdens for under-served populations.

Co-production is a process in which communities work together with the public sector to more efficiently and effectively produce public services. Invented in response to a local issue, we wish to share this concept of co-production more broadly, because the co-production of health and safety code enforcement could lead to more informed community stakeholders in future participatory planning endeavors. Outcomes from this study highlight ways in which community organizing can lead to progress towards a co-production model of health and safety code enforcement.

This study reports findings from a community-based case study conducted through a partnership between Esperanza Housing Corporation, a nonprofit organization serving economically distressed neighborhoods in South Los Angeles, and students from the University of Southern California. This study utilizes a mixed-methods approach that incorporates pre/post community health survey data collected before and after a recent voluntary and temporary closure of the University Park oil site’s operations. We rely also on spatial analysis, stakeholder interviews and participant observations. These methods were employed to (1) document the strengths and weaknesses of the existing air quality regulatory agency’s code enforcement system; (2) identify the ways in which Esperanza’s organizing efforts impact the agency’s code enforcement rules through a co-production model; and (3) demonstrate changes in community health since the community’s engagement in the regulatory process. The study also reflects on what these co-production activities contribute to the planning process, and how this organizing has led to influences on community planning that could prevent similar incompatible land use conflicts in other parts of Los Angeles in the future.
References


Abstract Index #: 472
NEIGHBORHOOD PARKS: HOW CAPITAL IMPROVEMENTS MATTER
Abstract System ID#: 349
Individual Paper

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Neighborhood parks are critical to the social fabric of many neighborhoods and play an important role in encouraging physical activity for youth and adults. Although one objective of any park improvement plan is to increase park use, few studies examine whether or not this is actually the case. This paper examines whether physical improvements to a neighborhood park increased its use and park-based physical activity. Observational data were collected on park use and activity at the intervention park and two control parks at two different points in time: pre- and post-park improvement construction. On-site surveys of park users were also conducted at the post-construction phase to better understand users’ perceptions and experiences after park improvements were completed. The paper discusses the implications of the park improvements in terms of overall park use and use among different population groups.

References


Index #: 473
CLIMATE VARIABILITY AND DECISION SHORTCUTS IN EMERGENCY PLANNING AND MANAGEMENT
Abstract System ID#: 360
Individual Paper

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All localities endure occasional extreme weather events such as floods or droughts, but some areas also may experience intermediate- to long-term term variations in weather patterns where precipitation, temperature, or storms may deviate sharply from long-term normals. The variations may include exceptionally busy hurricane seasons, long-term droughts, El Niño or La Niña events, or other extreme seasonal weather. Anticipation of such seasonal anomalies holds promise for improving flood, drought, and hurricane preparation, and some local officials have effectively used seasonal climate forecasts to improve emergency management practice. However, prior research suggests that even when signals are clear and extreme events appear strongly correlated with seasonal climate signals, the application of climate information to improve local disaster planning poses difficulties.

With support from the NSF and NOAA, we have conducted a multi-year, mixed methods study using focus groups, simulation exercises, and a survey to examine climate forecast use in emergency planning and management. We emphasize the ways in which local emergency managers (EMs) make decisions with uncertain forecasts and whether these decisions differ when forecasts are presented differently. Our principal hypothesis is that these public officials apply a variety of heuristics, or decision shortcuts, in using information to decide on a course of action for an uncertain future. While a large literature in risk and decision analysis has emerged on the influence of these heuristics and the potentially perverse outcomes that result from their application in decision making of private individuals, much less has appeared on the role of the heuristics in public decision making under uncertainty, the target of our work. Drawing on a sample of the general population, we also explore whether the difficulties that these EMs face in decision making under uncertainty differ from those of the average person on the street.

We have previously shared findings of our focus groups and exercises with emergency managers at the ACSP conference, but in this paper and presentation we present the results of a national-level survey of county emergency managers engaged in flood and drought planning and emergency management. In addition to collecting background information on respondents (e.g., gender, professional experience, educational background, etc.), the survey questionnaire presents eight climate and flood emergency management scenarios to investigate the role of several decision heuristics (e.g., numeracy, anchoring, and prospect theory) in influencing the choice of actions. Each of the eight scenario has four treatments, but each of the respondents sees only one of these treatments. As noted above, we also have imposed the same structure in a survey of the general population. To test for differences across different treatments and with respect to EMs vs. the general population, we employ ANOVA analysis.

In addition to contributing to understanding of decision-making processes, our project will develop general practical mechanisms to improve risk communication and the incorporation of scientific information in flood and drought planning, mitigation, and management. Moreover, although centered on climate variability, the work applies to a much larger class of problems associated with decision making under uncertainty, a central element of planning practice but one that the planning literature has virtually entirely ignored.

References

The prevalence of obesity in the United States has reached alarming proportions for adults and children. Flegal et al. (2010) found the prevalence of obesity among men and women in 2007-2008 were 33.8% and 35.5% respectively. Obesity is responsible for approximately 5% to 7% of total annual health care expenditures in the United States. Obesity is also associated with poverty. The National Health Interview Survey dataset identified that the lowest income groups contain a disproportionately higher proportion of obese persons. Hill et al. (2003) assert that individual factor, particularly genetic, clearly contributes to individual differences in weight and height, but the rapid weight gain is a result of the changing environment. Environmental factors promote overconsumption of energy and reduce total energy expenditure by reducing physical activity (Papas et al. 2007).

This NIH-funded study collects data of obesity levels and pertinent related factors behavioral/lifestyle factors, built environment factors and socioeconomic/demographic factors from residents in six low-income neighborhoods in Savannah, Georgia. The surveys were conducted in two rounds to produce a two-year longitudinal dataset: June 2012-May 2013 and June 2013-April 2014. The survey includes 65 questions covering obesity and health-related topics: 1) Behavioral/lifestyle/cultural beliefs: nutrition, eating habits, physical activity, leisure activities; 2) Perceived/actual built environment: sidewalks, bike paths, playgrounds, gyms, medical care facilities, and grocery stores availability, and 3) Socioeconomic/demographic: age, gender, race, household size and ages, education, income, marital status, employment status, access to health care, health insurance, age when children were born, etc.

The data collection also include BMI and waist circumference measurements of randomly selected residents and field observations about the neighborhoods’ built environment, including availability of playground or recreational facilities, sidewalks and bike paths, and food outlets including supermarkets, grocery stores, convenience stores, fast food establishments, full-service restaurants and limited-service restaurants in and surrounding the study areas.

This study finds the obesity rate of residents of low-income neighborhoods is 35.8%. Obese respondents and non-obese respondents have differences in physical activities, eating habits and the use of neighborhood facilities. The ANOVA tests show insignificant differences between obese and non-obese respondents except for (1) the total minutes of walking during break and/or lunch time at work or school, (2) the frequency of eating pizza and (3) the use of park, public recreation centers, gyms, or fitness facilities, trail for walking or biking, and school that allows the public to use their facility for physical activity. Using these preliminary findings, this study will develop a multivariate model and identify the association of the built environment with physical activity and obesity among the residents of low-income neighborhoods.

References
Children are recognized as a particularly vulnerable group for traffic-related fatalities and injuries (National Highway Traffic Safety Administration, 2012). In the U.S., motor-vehicle collisions were the leading cause of death for children with age 4, 11, 12, 13, and 14 in 2010 (National Highway Traffic Safety Administration, 2012). An average of 3 children aged 14 and younger were killed, and 469 within this age range were injured in traffic crashes each day in 2010 in the U.S. (National Highway Traffic Safety Administration, 2012).

School areas experience an abundant amount of vehicles traffic (e.g., trips picking up children from school) during the morning and afternoon peak periods. For example, there were about 30 billion vehicle miles traveled and 6.6 billion vehicle trips made for taking/picking up children to/from school in 2009 in the U.S. (N. C. McDonald, Brown, Marchetti, & Pedroso, 2011). Traffic concerns were identified as a prominent factor for parents to determine child’s travel mode to/from school (Martin & Carlson, 2005).

This study used a comprehensive approach to examine a wide range of built environmental attributes, including road environments and neighborhood environments around schools, for their potential links with crashes involving elementary school-aged children during school travel time. The author analyzed the risk of occurrence of a collision involving elementary school-aged children during school travel time around 78 elementary schools in the Austin Independent School District (AISD), TX, by using two-level (street segment-level and school-level) binomial logistic models.

The results showed that school areas with a greater percentage of population with low education levels (less than high school) were associated with increased likelihoods of having crashes involving elementary school-aged children during school travel time.

For road environments, highways/interstates and arterial roads had higher probabilities of school travel-related crashes, while local roads had lower likelihoods. Roads with completed sidewalks decreased the likelihood of crashes involving elementary school-aged children during school travel time. This study added to previous research that two contextual variables (arterial roads and transit stop) had significant influence on school travel-related collisions.

The results have several implications for built environmental designs around schools and school site choice in promoting school travel safety. First, planners should plan an environment with low traffic volume and low-speed roads around the school area. Second, planners should consider strategies to limit non-residential uses along the streets near schools and/or locate schools within or close to residential neighborhoods. Last, planners should pay more attention to roads with transit services. Based on the possible explanation that transit stops produce multiple pedestrian activities at a time and lead to potential traffic conflicts, planners need to use traffic calming strategies such as the provision of buffers between transit stops and vehicle roadways to promote safety.

References
FOOD SECURITY AND LOCAL FOOD SYSTEMS FOR HEALTHY, LIVABLE AND SUSTAINABLE COMMUNITIES IN NORTHERN ALABAMA

Abstract Index #: 476

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Food security, a condition in which “... all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO, 2002), is one of several conditions essential to a healthy and well-nourished population (Coleman-Jensen, 2013). Food insecurity exists when people do not have adequate physical, social or economic access. Household measurement of food insecurity focuses on chronic hunger and poverty. The Alabama Food Bank Association points out the disturbing trend in this wealthy country of the persistence of hunger and poverty and contends that these problems are not confined to small pockets of American society.

USDA’s Economic Research Service (Coleman-Jensen, 2013) estimates that 14.5 percent (17.6 million households) of American households were food insecure at least some time during 2012; these households’ access to adequate food was limited by a lack of money and other resources. Coleman-Jensen (2013) also shows that the average percent of food insecurity in Alabama grew from 12.5% between 2000 and 2002 to 17.9% between 2010 and 2012.

The Food Research Action Center (2012) uses a similar term – food hardship – where households indicated that they did not have enough money to buy food that they or their family needed. FRAC estimated that Alabama had the 2nd highest (23.4%) food hardship rate in the nation in 2011.

This research examines food insecurity and sources of food, along with the roles of urban agriculture and local food systems in North Alabama, specifically focusing on the Huntsville MSA, one of the fastest growing regions in Alabama. The overall goal is to develop a geographic picture of the region and cities at risk for food insecurity as well as the food resources available across the region. By noting places with high food insecurity risk and comparing them to places where food is available, analysis will indicate areas of unmet need. In addition, the research will garner options regarding the cost and benefits of a local food system for North Alabama, potential public benefits of expanding local foods systems focusing on public policies and programs that support local foods and the role of local food systems improving food security. This information will enable the Local Food Banks, City Planning Departments, and other partnering agencies to identify where initiatives addressing food insecurity and hunger could have the greatest potential impact and to increase the understanding of sustainable local food system planning. Ultimately, the goal is to develop a road map of strategies to share with government and human services agencies, and families struggling with food insecurity or hunger.

The methodology for this study is adapted from a similar study conducted by Wauchope and Ward (2012) of the Carsey Institute where they mapped food security and food sources in New Hampshire. Census tracts will be used as a proxy for neighborhoods and will use 2011-2013 American Community Survey data to determine locations of food insecurity, and traditional and non-traditional food sources. In addition, the research will develop and implement a convenience survey to capture key experts’ options on the costs and benefits of a local food system. These experts will be members of the education, communication and membership sub-committees of the North Alabama’s Food Policy Council Steering Committee.

References

WHEN IS FOOD INSECURE? IDENTIFYING SPATIAL AND TEMPORAL PATTERNS IN FOOD ACQUISITION AND NUTRITION IN CHESTER, PA
Abstract System ID#: 456
Pre-organized Session: Human Dimensions of Food Access

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Explaining geographic disparities in access to healthy food has been the subject of much research, yet little attention has been paid to the temporal dimensions of food access and health. How food acquisition changes over time is of particular interest when studying low-income populations, as government assistance or SNAP benefits may be the primary means by which food purchases are made, and these benefits are typically allocated only once a month. Despite the SNAP program’s goal of decreasing food insecurity, the benefits provided are often not sufficient to cover a month’s worth of food, which results in the need for many to rely on emergency food resources, such as food pantries, in order to make ends meet.

This study seeks to better understand the dynamic food acquisition patterns of low-income individuals by evaluating how shoppers manage resource constraints with monthly benefit allocations and what role emergency food networks play in food security and the nutrition of low-income shoppers. This paper focuses on three questions: 1) What temporal and spatial patterns exist for food acquisition in a monthly cycle? 2) What role do mobility and geographic access to food resources play in emergency food network usage? 3) How are nutrition and food insecurity impacted over the course of the month by reliance on emergency food resources?

This paper employs a mixed methods approach combining quantitative analysis of survey data, nutritional coding and geospatial techniques. We implemented a survey (n=719) in Chester, PA asking about where participants shop for food, use of food pantries, SNAP participation and food insecurity. A subset of participants (n=89) collected grocery receipts and recorded everywhere they acquired food (including food pantries) for a two week period. All receipts (including food pantry acquisitions) were coded for nutrient content. Three-dimensional mapping, distance calculations and regression analysis were used to assess diet and spatiotemporal relationships of food acquisition.

Consistent with existing literature, this study found that SNAP recipients were nearly twice as likely to use food pantries as non-SNAP recipients (p<0.01). This relationship was strengthened for those living closer to food pantries, suggesting that proximity to emergency food sources plays an important role in utilization. Preliminary 3-D mapping indicates larger grocery expenditures early in the month with pantry usage increasing later in the month. Analysis of nutritional coding is ongoing.

This study illuminates patterns of food acquisition among low-income populations that link geographic access, resource constraints and emergency food networks. The temporal constraints of monthly assistance programs, and ensuing reliance on emergency food resources, have strong implications for the food security and nutritional intake of low-income shoppers. This research offers methodological contributions to the investigation of urban food environments and suggests new considerations for planners endeavoring to create healthy urban places and policies.
References


Abstract Index #: 478

CULTURAL FACTORS INFLUENCING PARENTS’ DECISION ON CHILDREN’S ACTIVE COMMUTING TO SCHOOL: IMPLICATIONS FOR SAFE ROUTES TO SCHOOL PROGRAMS

Abstract System ID#: 460
Individual Paper

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Background: Active commuting to school is one of the most effective ways to be physically active for children. However, children in the US walk, bike, and use other forms of active transportation less than in the past. Meanwhile, foreign-born population accounts for 13% of total US population and is rapidly growing in many urban areas. Previous studies reported differences in travel behaviors between foreign-born population and native counterparts; foreign-born population is more likely to use transit, walk, bike and carpool, particularly during their first five years in the US compared to the native (Blumenberg, 2007; McDonald, 2008). Few studies examined foreign-born and ethnic minority children’s active commuting and their association with acculturation (Martinez et al., 2008; Mendoza et al., 2010).

Understanding foreign-born population’s perception on and pattern of active commuting to school and factors influencing their decision would help build comprehensive frameworks for Safe Routes to School (SRTS) programs that are culturally relevant and better achieve positive health impacts of active travel among all groups.

Purpose: This exploratory study focuses on differences in perceptions and attitudes toward neighborhood environments influencing the decision on children’s active commuting to school between foreign-born and native-born parents. It also examines whether attitudes toward active commuting to school vary by acculturation level among foreign-born parents.

Methods: online-parent survey was conducted in March-June 2014 among parents whose children go to school in Sweet Home Central School District in Town of Amherst, NY. A total of 376 parents who responded to the online parent survey were found valid for analysis. The survey provided socio-demographics, commuting patterns of both parents and children, and parents’ perceptions and concerns about neighborhood environments relating to their children’s active commuting to school. For foreign-born parents, years of residence in the US and acculturation questions from the short version of ARSMA-II (Cuellar et al., 1995) were additionally asked. Descriptive and bivariate analysis were conducted to compare patterns, attitudes, and characteristics of the two groups, and a logistic regression model was employed to examine the influence of acculturation level on the foreign-born parents’ future decision on children’s active commuting to school.

Results: 44 out of 376 respondents (12%) were foreign-born parents. Very low rates of active commuting to school (1.6% walked, 1.1% biked to school) and no significant difference in travel modes were reported between the two groups. Differences in perceptions on the environment were found. Greater proportion of foreign-born parents perceived that school was not encouraging enough for children to walk to school (p-value <0.01) and that
too much traffic along nearby streets (p-value=0.05) and high crime rate in the neighborhood made walking unsafe (p-value<0.05) compared to the native-born parents. Among foreign-born parents, their assimilation to American culture is negatively associated with their willingness to allow their children’s active commuting to school in the near future when adjusted for child’s grade, gender, number of vehicles, and distance to school (p-value<0.05).

Conclusion: greater concerns on traffic and crime safety and more critical view on school’s efforts to promote active school travel among foreign-born parents might have reflected their previous experiences in their home countries, where social and built environments are quite different from those of the US cities. Follow-up in-depth interviews with these parents would reveal why the perceptions differed between the two groups and why more acculturated foreign-born parents were less likely to allow their child to walk or bike to school without an adult. In SRTS programs, great emphasis has been given to modifiable educational and environmental factors. Consideration for cultural shift might also be needed to reverse the declining trends of active school travel among children.

References

Abstract Index #: 479
FOOD INSECURITY IN FARM COUNTY: USE OF PUBLIC POLICY TO OVERCOME THE RURAL PARADOX
Abstract System ID#: 464
Individual Paper

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It is unfortunate that, despite being a major source of food, rural areas in the United States continue to suffer from high rates of food insecurity (Garasky, Morton, and Greder 2006). This paradoxical condition in rural settings continues to receive limited attention in the food security policy literature, which gives a short shrift to rural food systems (Fleischhacker et al. 2013). This paper fills a gap in the literature by documenting innovations in public policy approaches, if any, that support, preserve, and enhance farming in rural settings in a way that simultaneously promotes rural agricultural viability while making affordable healthy food accessible to rural populations. The paper reports results from a national survey of local government and describes broad trends in how planning and public policy tools are being used by rural local governments to strengthen food systems. To describe how these tools are used to promote food access and agricultural viability in rural settings, the paper includes a deep case study of rural planners regarding their engagement in the food system. It also includes the results of a rural county government in Cass County, Iowa trying to use public policy to strengthen the food system. The paper concludes with insights for how local governments can use policy tools to strengthen rural food systems.
REFERENCES


Abstract Index #: 480
EVALUATION OF A COMMUNITY ENGAGEMENT AND COLLECTIVE IMPACT FRAMEWORK FOR REDUCING OBESITY
Abstract System ID#: 478
Individual Paper

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In the past 50 years, epidemiology has revealed the importance of behavioral, social, economic, and environmental factors as chronic disease risk factors. This information has been used to develop effective interventions in clinical and community settings, leading to major declines in smoking and cardiovascular disease. In contrast to this progress, obesity rates have increased, especially among children and disadvantaged populations, due to poor nutrition and lack of physical activity. There is a compelling need for applied research to move communities from “what works” to “how to make it work”, and support is needed for broad-based programs to accelerate research to practice.

The Wisconsin Obesity Prevention Initiative (OPI) is being conducted by a multi-disciplinary team of researchers using a community engagement and collective impact (CECI) framework to find multi-setting strategies to reduce the rate of obesity in Wisconsin. Phase one of the OPI develops and tests the implementation of the CECI framework and multi-setting strategies in Menominee and Marathon Counties, Wisconsin. The OPI will address many of the current gaps in obesity prevention in both counties specifically focusing on the built environment, food systems, and early childhood settings.

Building off of phase one, this paper will provide a comparative analysis of the two pilot counties in their ability to implement evidence based strategies for reducing obesity. Menominee County, home to the Menominee Nation, is almost 90% American Indian and ranks last of 72 Wisconsin Counties in the County Health Rankings with a high prevalence of overweight and obesity in both children and adults. Marathon County is primarily a rural county and ranks 24th in the County Health Rankings. The Marathon County Health Department identified obesity as one of the top health priorities in a 2006 Community Health Assessment and has been working on the issue ever since. This study will provide a background on the two counties specifically focusing on obesity rates. It will then perform a baseline analysis of multi-setting policies, programs, and design components that the counties are already implementing in the interest of reducing obesity rates. Finally, the study will provide a detailed analysis of the programs, policies, fiscal situation, and cultural characteristics within these counties that either capacitate or inhibit them from implementing evidence based interventions to curb obesity.

While this study focuses on two counties in Wisconsin, it will be an initial step for developing external validity for the CECI framework used by the OPI. By characterizing the environments that can be productive in combatting obesity, and highlighting any potential barriers to this progress, this study will inform other counties in Wisconsin...
and nationally about steps they will need to take to build a collective impact “backbone” that is complemented by community engagement to support, sustain, and increase the impact of multi-setting obesity prevention initiatives.

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Abstract Index #: 481
ASSESSING THE RELATIONSHIP BETWEEN BODY MASS INDEX AND BUILT ENVIRONMENT MEASURES ACROSS MULTIPLE CONTEXTS USING BIG DATA
Individual Paper
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A number of studies have attempted to quantify the relationship between indicators of obesity, such as body mass index (BMI), and the physical environment. However, there is still a striking lack of agreement in the findings of the literature. To some extent this is due to the fact that relationships appear to vary significantly by geographic and socio-economic contexts. Few researchers have been able to systematically address this variation due to limitations in data availability. Our team has secured access to over 50 million driver's license records from across six states. These records include subjects' self-reported height, weight, age, gender and address. We also have access to a nationwide database of business locations to generate fine resolution independent variables. In this study we address geocode several million of these records and statistically analyze how BMI relates to two indicators of the food environment—density of fast food and convenience store outlets—and three indicators of walkability—accessibility to retail establishments, accessibility to open space/trails, and density of employment. We geographically assign these indicators to subjects' addresses and analyze their relationships with BMI, using both linear regressions and spatial error regressions to account for spatial autocorrelation. We then assess the spatial non-stationarity of these relationships to determine how they vary by urbanization, socio-economic and geographic contexts. Preliminary results from our analysis of one of the rural states in this database indicate that commercial density is significantly and positively associated with BMI, a result that is at odds with much of the literature. That analysis was validated by conducting a regression of a smaller but much more detailed data set populated with actual measured BMI values and numerous medical and socio-economic control variables and results were found to be consistent.

Abstract Index #: 482
TIMELINESS OF DISASTER RECOVERY AID RESPONSE IN POST-HURRICANE SANDY NEW YORK CITY
Individual Paper
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Institutional response of governmental and non-governmental actors is a critical dimension of successful community recovery after disasters. In recent years, disaster recovery management as a field has seen some significant changes. New national and federal policies are often formulated to guide recovery and reconstruction specifically as seen in India, Indonesia, and more recently, in the U.S. after Hurricane Katrina; multi-donor authorities are formed to specifically coordinate actions of non-governmental actors as was seen in Indonesia, Pakistan and Haiti; and, international aid organizations are increasingly adopting minimum standards for response activities, such as in the Sphere Handbook.

Despite these major advances, however, failures in recovery management continue to occur. Prior research has found that well-intentioned reconstruction policies and unregulated actions of non-governmental organizations (NGOs) have led to involuntary displacement of coastal residents (Ingram, Franco, Rumbaitis-del Rio, & Khazai, 2006). Bureaucratic procedures have been found to delay reconstruction and create barriers for adequate and timely aid delivery, or even to public participation in recovery planning (Mukherji, 2008; Andrew, Arlikatti, Long, & Kendra, 2012; Green & Olshansky, 2012). What is less studied however, is the ability of aid policy to address the changing needs of recovering households in a timely matter. The failure of aid policies and programs to do so can lead to adverse outcomes for these households, particularly for low-income and minority populations. For instance, by HUD's own assessment (Abt Associates, 2013), a large number of renter and homeowner households displaced by Hurricane Katrina ended up in the public housing system four years after the disaster because federal housing assistance aid ran out too soon. That the majority of these households were low-income and black only adds to the picture of recovery policies exacerbating social inequities.

This research study compares the evolving needs of households affected by the 2012 Hurricane Sandy in New York City to the timeline of recovery aid provision in the City to answer the question: was aid response timely and accurate? This study adopts a longitudinal and multi-point perspective. Data was collected through a random sample mail-in survey of 2,000 households in disaster-affected counties of Brooklyn, Queens, and Richmond (Staten Island) in New York City first in 2013 and again, in 2015. Data was also collected through in-depth key informant interviews of households in three specific New York neighborhoods (Red Hook in Brooklyn, The Rockaways in Queens, and Midland Beach in Staten Island) and through key informant interviews of public officials involved in crafting and implementing aid policies at the state and local level. Finally, data was also obtained through a review of secondary source documents regarding recovery policy, aid and assistance at different levels of governance. Survey data was analyzed using descriptive and inferential statistics, and interview and document data using qualitative content analysis techniques. The results of this research study can help explain why recovery management succeeds or fails in the long run and how it can be changed to effect better local recovery outcomes in future disasters.

This study is funded by the National Science Foundation and is one component of a three-year longitudinal study on household and business recovery in New York after the 2012 Hurricane Sandy.

References

COMPACT DEVELOPMENT AND BMI: ENVIRONMENTAL DETERMINISM OR SELF-SELECTION?

Obesity has become a significant health problem as the prevalence of adult obesity and overweight in the United States has risen significantly in the last 30 years. If current trends continue obesity and physical inactivity may soon overtake tobacco use as the number one modifiable cause of death.

The amount of multidisciplinary research on obesity and the built environment has grown at a frenzied pace. There are now multiple reviews of the reviews summarizing literally hundreds of articles. Many of these reviews point out the limitations of current work with three common themes; a general reliance on cross sectional studies, inconsistent measures of the built environment, and discrepancies in scale between the geographical units of analysis.

The purpose of this work is to relate weight status and physical activity of a young adult population to the built environment at the neighborhood scale while addressing the concerns presented above. The research question asks: How do sociodemographic characteristics at the individual level and built environment characteristics at the neighborhood level affect BMI values and obesity status as well as participation in physical activity in young adults?

The individual-level data for this study come from the National Longitudinal Survey of Youth 1997 Cohort. The survey is managed through the Bureau of Labor Statistics and consists of a nationally representative sample of youth born between 1980 and 1984 with initial ages in 1997 ranging from 12 to 18 years. The census tract compactness/sprawl index is used as the measure of the built environment for an individual’s neighborhood. This index places urban sprawl at one end of a continuous scale and compact development at the other and consists of 8 variables representing development density, land use mix and street connectivity.

Our cross sectional analysis shows, once again, that residents of compact neighborhoods have lower BMIs than residents of sprawling neighborhoods, after controlling for sociodemographic differences. Why might this be the case? Environmental determinism posits that the environment makes residents more or less physically active, and hence more or less heavy. Residential self-selection posits that people who want to be physically active and fit choose to live in compact neighborhoods, while those who do not care are more likely to opt for sprawling neighborhoods. The authors of this paper have been strong proponents of environmental determinism.

From our study results, we dismiss environmental determinism for two reasons. First, we find no evidence that movers from one built environment to another have weight gains or losses within the time frame of our data set. Second, we find no evidence that stayers in one place have higher or lower BMIs, depending on the compactness of their neighborhoods. Rather we now believe that the main effect of place, which accounts for our cross sectional results, is one of self selection.

This conclusion is based on two findings. First, we find that people of healthy weight are more likely to move to compact neighborhoods, while people who are overweight are more likely to move to sprawling neighborhoods. Second, we find an association between weight of movers and the degree of neighborhood compactness in a longitudinal analysis.
This is not to say that characteristics of place are unimportant, as society needs to meet the latent demand for walkable places, which are currently undersupplied. But characteristics of place appear to have limited ability to alter the behavior of those who are not inclined to be physically active and fit.

Abstract Index #: 484
IDENTIFYING POTENTIAL PARTICIPANTS IN THE WALKING SCHOOL BUS PROGRAM
Abstract System ID#: 555
Individual Paper

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Physically active commuting to school among K-8th grade children notably declined from 40.7% in 1969 to 12.9% in 2001 in the U.S (McDonald, 2007). Studies identified many co-benefits in active commuting such as vehicle trip reduction, physical activity increase, children’s social and mental development (Mackett, Lucas, Paskins, & Turbin, 2002). However, many policy evaluation studies have identified safety issues as barriers to children’s active commuting, as parents reported safety concerns on children’s school travel that are not supervised by responsible adults (Stewart, 2011). To address this issue, organized programs, such as the Walking School Bus (WBS, defined as an adult-escorted group of children who walk to/from school), were proposed as a solution for children’s school travel safety (Pedestrian and Bicycle Information Center for the Partnership for a Walkable America). A feasibility study on the WSB program reports that the biggest challenge was recruiting participants and lead parent volunteers (Kong et al., 2009).

The current study aims to identify potential participants of the WSB program in an urban setting. We conducted an on-line survey among parents of K-8th graders in the Sweet Home Central School District, in the greater Buffalo area, NY, which has 4 elementary schools (average enrollments of 354) and 1 middle school (enrollments of 776). Between March 2014 and May 2014, parents were asked to complete a self-administered 15-to-20-minute-long survey asking children’s commuting behaviors, parents’ neighborhood perceptions, attitudes toward walking, and willingness to participate in a future WSB program (my child would walk to school, if a school-friend were to join my child on his/her way to school). We analyzed dichotomized answers to the potential WSB participation using descriptive statistics and a logit model with predictors of demographic variables, neighborhood perceptions, attitudes toward walking, and distance from home to school.

Parents of 389 students (response rate: 18% of total students in the district) completed the survey, and 337 provided valid answers for the WSB participation question. Out of the valid responses, 107 (32%) answered that they would participate in the WSB program, although active commuting prevalence among their children was 2.7% (significantly lower than the national average of 13%). Of the potential WSB participants, 92% children had no school-friends who walk or bike to school. The logit model shows that higher grade, perceived distance between home and school being <= 2 mi, and parent’s positive attitudes toward walking were associated with the WSB program (p <.05).

Our data shows that a third of parents were willing to participate in the WSB program when friends of their children also join the program. This suggests social-network approach may be effective in changing children’s active commuting behaviors individually and collectively. It is also noteworthy that there were a substantial number of potential participants in the WSB program in the school district where school bus service transports a majority of the students (96% of students had school bus with the average riding time < 30 min according to the district transportation office). Further investigations will be followed with additional objective built environment data such as the shortest route distance and walking minutes between home and school.
A WEALTH CREATION APPROACH TO DEVELOPING LOCAL FOOD SYSTEMS

Wealth creation is a relatively new but growing systems-thinking approach to economic and community development (Pender, Marre, & Reeder, 2012). This approach increases community leaders’ capacity to achieve their economic development goals by using a value chain to target interventions. With an emphasis on building multiple forms of wealth, a highly collaborative process seeks to align fragmented efforts while intentionally creating roles for low-income individuals. Building on previous efforts, Rural Development Initiatives, Oregon State University Extension and other partners launched a funded wealth creation program in Oregon in 2014. Four of the six regions chose to focus on building a local food system within their region. Local food systems planning efforts are spreading across the country (Low et al., 2015) and the work fits into wealth creation model as communities seek to realize multiple benefits while meeting diverse market needs.

In the wealth creation framework, communities are encouraged to convene businesses within the identified value chain and develop a shared understanding of existing market demand and the region’s collective ability to meet this demand. The approach emphasizes local ownership, investing concurrently across the forms of capitals, and the intentional inclusion of marginalized groups in business opportunities and entrepreneurship efforts. With these assertions of priorities, residents lead the effort of convening stakeholders, formulating shared value propositions, and seeking to encourage new collective behavior that provides widespread benefit. Creating a set of indicators to monitor ongoing progress across the eight forms of capital is also a part of the program. Interventions focused on providing access to technical assistance by connecting regional teams to other resources and by offering coaching directly to the team leaders in a way that builds on the ground capacity within the region.

Participant surveys, interviews, and document analysis assesses the impact of interventions and contrasts the levels of impacts across the six participating communities. Communities were most likely to build new social capital among businesses and participants. Some concepts of the program were more readily understood than others. In this systems-approach, more resources need to be spent developing community capacity to create indicators for measuring progress and effectively engage economically marginalized people. Participants also struggle to balance competing goals of identifying feasible business opportunities with the desire to see tangible benefits in the immediate region. Within the framework of a local food system this means balancing exports with import substitution and the struggle to understand the true impacts of local businesses (Schmit, Jablonski, & Kay, 2013). In Oregon, these local efforts challenged broader industry trends towards consolidation in aggregation and processing capacities and the resulting decline in acres devoted to high value crops. This program is instructive.
for other efforts to build locally led development efforts that respond to changing market conditions and competing priorities.

References

Abstract Index #: 486
ACCESS TO HEALTHY FOOD, FAST FOOD, AND OBESITY RATES
Abstract System ID#: 605
Individual Paper

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There has been a growing body of research focusing on built environment’s influence on dietary behavior change based on the awareness of the impact of human diet and nutrition on health outcomes. A significant body of literature has documented inadequacies in food environments, especially in minority and low-income neighborhoods. The metaphor of “food deserts,” used to describe neighborhoods with limited food retail, has captured public and academic attention in recent years (Cummins and Macintyre 2002). Yet the metaphor has been used rather loosely, in some instances referring to areas marked by an absence of supermarkets (Short, Guthman, and Raskin 2007), in others to areas characterized by limited food retail outlets where people can buy healthy foods (Wrigley et al. 2002). Several studies, for example, report fewer supermarkets in minority neighborhoods (Raja, Ma, and Yadav 2008; Morland, Diez Roux, and Wing 2006). At the same time, the growth of the fast food industry has been an important factor for increased food consumption. In the last 2 decades in 20th Century, the percentage of calories attributable to fast-food consumption has increased from 3% to 12% of total calories consumed in the United States. (Lindgren et al 1999) Fast food is notably high in fat content, and studies have found associations between fast food intake and increased body mass index (BMI) and weight gain. (French et all 2000)

Access to healthy food and fast food can be an important determinant of a healthy diet. This paper examines associations between access to healthy food or fast food and obesity. Also, other sets of hypothesis that people belonging to different socioeconomic groups, such as people of color, people of low-socioeconomic status, have access to different neighborhood food destinations will be tested to see the relationship between access to healthy food, fast food, race/ethnicity, and income.

The OLS (Ordinary Least-Square) regression analysis will be conducted to assess how access to grocery stores/supermarkets, convenience stores, and fast food restaurants, and SES explain obesity rates of residents in the U.S. The bivariate result and a couple of multivariate regression results will be provided explaining the possible associations between access to healthy food, fast food, race/ethnicity, and income.

Given the previous findings that there are impacts of food environments on public health, disparities in the food environments can be a critical issue degrading social justice among neighborhoods. Illustrating the possible associations between access to healthy food, fast food, race/ethnicity, and income will be beneficial for the applications for urban planners, public health practitioners, and policy makers to provide more equitable food access to the public.
CULTURING ESTABLISHED FOOD SYSTEMS IN A 'FOOD DEsert'

Abstract System ID#: 678
Roundtable or Informal Discussion Session

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This round-table critiques the term 'food desert' to evaluate various planning responses. The United States Department of Agriculture (USDA) has defined a food desert as a census tract with a substantial share of low-income residents who lack access to a large grocery store or healthy, affordable food retail outlet. Yet, 'food deserts' often have their own well-adapted systems of ride-shares to grocery outlets, bodegas, and truck vendors. Perhaps the terminology of 'food desert' is apt- but the response inappropriate - or a case of both? This round-table will shift the conversation of 'food desert' classification and intervention to recognizing food systems in place and how interventions might harm or augment these practices. The round-table discussion will form the basis of a commentary for publication.

The starting point for this conversation is the critique of the term and of various responses to 'food deserts.' The term 'desert' often implies a lack of life, though biologists (and food scholars) are apt to point out that this biome is full of thriving ecosystems if you know how to look for them. The phrase 'food desert' itself is critiqued for its portrayal of a bleak urban environment- often ignoring its vibrancy (McClintock, 2008; Shannon, 2014). How food deserts are measured is also criticized. The emphasis on measuring proximity to grocery stores both ignores other sources of food in neighborhoods and people's resourcefulness, and validates a policy approach that emphasizes supply-oriented issues rather than political ones of anti-poverty, affordability, healthy options and need (Battersby, 2012; Guthman, 2011). Bedore (2010) argues that work on food deserts "bounds health problems within low-income communities." The result is to place the problem and the blame squarely in poor neighborhoods, rather than in the policies and actors which shape urban food systems and accessibility (Shannon, 2014).

The round-table will briefly share stories about what low-income communities around the world and through history are doing and have done to cope with the perceived lack of fresh, healthy food. Solutions range from self-purveying through gardens to curbside vending. The round-table will then tie these practices to planning tools and brainstorm how current food planning policy weakens or strengthens these fresh food access points in low-income neighborhoods. For example, how does planning impact street vendors? How has street vending changed with the introduction of a supermarket or a wholesale produce terminal? The round-table seeks to chart a community development research and policy vision for supporting and strengthening already existing networks of fresh, healthy food through urban gardening, fresh food financing, curbside vending and policy advocacy. Our discussion will address the merits and drawbacks of various approaches and interventions, highlighting issues of justice and equity attached to the spatial disparities created in places with low accessibility to healthy food.
More Than the Sum of Their Parts: An Exploration of the Connective and Facilitative Functions of Food Policy Councils

Abstract Index #: 488
MORE THAN THE SUM OF THEIR PARTS: AN EXPLORATION OF THE CONNECTIVE AND FACILITATIVE FUNCTIONS OF FOOD POLICY COUNCILS
Abstract System ID#: 683
Individual Paper

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Decentralization and misalignment of food policy and programming at the state and local levels have resulted in confusion and contradictory food systems incentives and activities. Such misalignments call for well-designed approaches to participatory and multi-stakeholder food systems planning processes that planners can develop and lead. By convening diverse stakeholders to address concerns pertaining to a host of food-related issues, food policy councils can draw on their members’ wide-ranging knowledge and experience to help improve regulatory alignment and problem-solving across the different agencies and sectors that shape our food system.

This paper highlights findings from exploratory research conducted in conjunction with the University of Wisconsin-Madison USDA AFRI Community and Regional Food Systems project. It draws on the literature as well as key informant interviews with food policy council members to uncover what motivates individuals and organizations to participate in food policy councils, how their goals are addressed (or not) through participation in food policy council activities, and how food councils can foster innovative collaboration among members to produce systems-level impact. In particular, this paper illuminates the contributions of food policy councils to community and regional food systems planning efforts by highlighting specific connective and facilitative functions that food policy councils can provide to their constituents. The paper concludes with a discussion of the implications of these findings for food policy council structure, composition and process. This paper marks an important departure from much of the food policy council literature by critically examining dimensions of process rather than focusing solely on council composition or outputs.

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LOCATION OF POTENTIAL EMERGENCY SHELTERS: A CASE STUDY OF TEHRAN CITY

Abstract System ID#: 787
Individual Paper

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Considering population growth and thereupon increasing of buildings and structures in cities and especially megacities, preparedness toward confronting potential emergency situations created by natural hazards or other events is necessary in current urban planning. Natural hazards such as earthquakes disrupt urban systems that interrupt emergency response and operations. Proper emergency response in cities requires assessment of potential affected population and planning for rescue, relief and emergency shelters. Given such matter, in this paper earthquake vulnerability assessment in region one of Tehran Municipality and the location of potential emergency shelters in study region are studied to develop guidelines on emergency preparedness in megacities. Obviously such guidelines could be helpful confronting human-made hazards and could affect urban resiliency too.

Tehran the capital of Iran has had significant growth in recent decades. Considering the seismicity of Tehran City and the probable damages and consequences, supplying emergency shelter in regions of this city due to the interactions and complexities of urban systems is a very difficult task in post event. In this paper proposing the location of emergency shelters in region one of Tehran Municipality considering seismicity and estimation of structural and human damages using international standards is the main purpose.

The method of paper includes overview of Tehran city and case study region comprising physical, social, administrative and spatial features and the development trend during recent decades. Then Building damages and human casualties are estimated based on data from previous earthquakes in Iran such as Bam (2003) and Dahooeye-Zarand (2004). The building damages are estimated at three extensive, moderate and slight damage levels. Roads network, population density and open spaces in case study region are considered in vulnerability assessment to achieve a more precise picture of vulnerability situation. Given the vulnerability results and based on land-use plan of study region, open spaces and public buildings such as educational or sports centers and offices are specified. The potential spaces will be prioritized based on international standards and also considering characteristics as area of building, accessibility, infrastructural facilities and possibility of secondary hazards. Based on this prioritization, suitable places for emergency shelters are selected in a way to cover whole region. Finally guidelines toward vulnerability reduction and strengthening capacities will be issued. The guidelines are useful for similar situations in other cities and countries. The results are helpful for planners and managers at local and regional level and even planners at national level can apply the results in considerations on improving safety and sustainability in cities.

References
Food insecurity exists when individuals are unable to consistently access enough safe and nutritious food to maintain a healthy and active life. Unfortunately, evidence continues to suggest that certain communities are often without access to components of a healthy diet. I build upon previous research to understand if particular types of communities are at increased risk for food insecurity due to the spatial availability of fresh vegetables and fruit (FVF).

Among the most sensitive populations are women, children, low-income communities, rural residents and communities of color. Children are at particular risk when deprived of nutrition (Cook, et al 2004) and women who experience food insecurity are at increased risk of obesity, particularly among non-white populations (Adams, Grummer-Strawn and Chavez 2003). In addition, low-income, non-white, and rural residents face a greater possibility of experiencing food insecurity than do residents of other communities (Dean and Sharkey 2011a).

Oklahoma provides a particularly poignant setting for efforts to combat obesity through nutritional environment interventions in rural settings. According to the United Health Foundation, the state ranks 46th and 49th in consumption of fresh vegetables and fruits, respectively, and 44th in rates of obesity when compared to the rest of the United States. Additionally, Oklahoma is home to 391,949 individuals who identify as American Indian or Alaskan Native, the second largest population of any state. The prevalence of obesity among individuals of American Indian or Alaskan Native descent is higher than among white residents and tribal members experience higher mortality than whites, in part because of diabetes and social determinants resulting from circumstantial and environmental deficiencies (Espey et al. 2014) such as the lack of FVF and other nutritious food.

To understand the relationship between community characteristics and the availability of fresh vegetables and fruit, we assembled a spatial database of the addresses of approximately 1,600 stores that likely sell food across the state of Oklahoma. This list includes large-scale chain grocery stores (WalMart, Target, etc.), small-scale markets, corner stores, specialty markets (meat, cheese, etc.) as well as convenience stores and markets attached to fueling stations. We conducted an assessment of the availability of fresh vegetables and fruit at a sample of the stores across the state.

Using a modified Nutrition Environment Measures Survey for Stores (www.med.upenn.edu/nems/index.shtml) we inventoried the availability, price, and quality of five of the most frequently purchased vegetables and fruit according to the United States Department of Agriculture: tomatoes, potatoes, iceberg lettuce, bananas and apples. Total area of shelf space dedicated to the provision of all fresh vegetables and fruit as well as location of these items within the store were documented.

Geographic Information Systems and data from the 2010 Census and 2010 American Community Survey estimates were employed to understand the availability of fresh vegetables and fruit in a diverse set of communities chosen to contrast by race/ethnicity and the presence of populations who at particular risk when experiencing food insecurity (children, the elderly, low-income populations).

Data for this work is still being collected but we anticipate that results may be consistent with previous studies that demonstrated spatial inequality in the availability of healthy food across different types of communities. Planners and public health officials continue to grapple with the disparities that exist in the nutritional landscape. Notably, there is not a singular public policy that would alleviate hunger; food insecurity is largely contextual (Bitto 2003). Through continued efforts, planners can better identify the spatial, social and ecological processes that influence food availability in local communities as a means of crafting land use policy that enhances the local nutritional environment.

References


Abstract Index #: 491
FROM RESEARCH TO PRACTICE: USING EVIDENCE BASED INTERVENTIONS AND COMMUNITY ENGAGEMENT TO ADDRESS OBESITY IN WISCONSIN

Individual Paper

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In the past 50 years, epidemiology has revealed the importance of behavioral, social, economic, and environmental factors as chronic disease risk factors. This information has been used to develop effective interventions in clinical and community settings, leading to major declines in smoking and cardiovascular disease. Such interventions have been complex and vast, spanning multiple organizational environments, different regulatory environments, distinct jurisdictions, as well as complex social/demographic/economic contexts. Finally, there have been distinct academic assumptions to understand and reconcile to advance projects and establish evidentiary standards for success.

The Wisconsin Obesity Prevention Initiative (OPI) is a multi-disciplinary team of researchers using a community engagement and collective impact (CECI) framework to find multi-setting strategies to reduce the rate of obesity in Wisconsin. Phase one of the OPI has integrated the team, engaged the communities, begun to develop participatory processes for both the team and the communities and for relationships between the team and communities.

This paper will describe this participatory process, from an early stage of scoping and proposing the project prior to funding, to the pilot testing stage (July 2013, funding in July 2014 and pilot testing in April-September 2015). This paper will describe the project, the academic team (14 MD and PhD faculty and their graduate students) and will discuss the various frameworks for project planning and implementation and how these fared in the face of this large and complex project.

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Abstract Index #: 492
BUILT ENVIRONMENT FEATURES ASSOCIATED WITH PHYSICAL ACTIVITY IN DEVELOPING COUNTRIES

Individual Paper
The World Health Organization has identified a growing obesity epidemic in developing countries, concentrated in middle class populations and urban areas (World Health Organization, 2000). Problems include sprawling, auto-centered development; a shift away from active transportation (bicycling and walking); and an increase in calorie-dense, Western-style diets (c.f., Day et al., 2013). Research in developed countries has identified numerous built environment characteristics that are associated with physical activity; these features include mixed land use, higher density, parks and playgrounds, and distance to nonresidential destinations (c.f.; Active Living Research, 2010; Owen et al., 2004; Saelens & Handy, 2008). Less is known about associations between the built environment and physical activity in developing countries, where the built environment and cultural context differ. This paper reviews the research on the association of built environment features with physical activity in developing countries. The paper follows the model in Saelens and Handy’s (2008) review on built environment correlates of walking, which examined research from developed countries. The present study includes 208 studies of walking and physical activity from developed countries. Studies were identified through a search on the Web of Science for articles using these key words: physical activity, walk, bicycle, bicycling, travel, transportation, exercise, recreation, mode share AND environment, park, sidewalk, trail, mixed use, urban, suburban, urban design, walkability, walkable, bike-friendly OR active living, active design, walkability. Studies were also identified by searching the Active Living Research website and by reviewing the reference lists of several published literature reviews and of all studies included in this analysis. All studies reported empirical research, were conducted in one or more developing countries (as defined by the World Bank), were published in a peer reviewed journal, were written in English, and examined the association of built environment features (objective and/or perceived) with physical activity.

Research in this area is still in the early stages. Many studies used composite measures of the built environment that did not isolate specific built environment features. A number of studies (12) included measures of the perceived environment only. Most studies used self-report measures of physical activity. Of the total number of studies conducted in developing countries, the highest number (43) were from China. A majority of studies were conducted by researchers in public health and related fields, with some differences by country. Findings summarize associations between built environment features and physical activity. Of special note are differences between findings in developing countries and findings in the published research on developed countries. In this review, findings demonstrate a consistent association of urban (versus rural) environments with lower rates of physical activity. The association of density with physical activity is less clear than in research in developed countries, most likely because of uniformly high levels of density in urban areas for many developing countries, and because of the lack of distinction in many studies between physical activity for recreation versus for transportation. Conclusions suggest recommendations for future research in developing countries, with an emphasis on research tied to policy and design decision making.

References
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The use of geospatial analysis techniques in the study of Environmental Justice (EJ) and health has increased tremendously in recent years. On the other hand, there has been increased emphasis on demonstrating and incorporating indigenous environmental knowledges in different areas of planning, particularly environmental planning (Robbins, 2003), emphasizing the epistemological issues in GIS research that are best embedded in questions such as whose data and whose analysis? (e.g. Chambers, 2006).

Building on the previous research on participatory GIS and environmental advocacy, this paper focuses on how Participatory GIS (PGIS) helps integrate local knowledge and experiences with expert/ traditional GIS data to examine the environmental justice status of communities. This research is currently pending for IRB approval and is part of my dissertation which is focused on south Dallas neighborhoods. The actual field work and interviews are expected start by mid-March.

The main activities during PGIS are: (1) mental mapping of environmental vulnerabilities and health issues, (2) mapping the community as ecological spaces and analyzing land-use patterns, and (3) mapping the socioeconomic data (and health data if possible) to identify areas exposed to possible risks. Additionally the qualitative data from interviews and focus groups will be stored in GIS. The maps will be added as another layer or, if appropriate, added to the original layer. However, using the local knowledge is not possible in all areas. For example, with air pollution the community is able to provide information based on traffic and smell or fog, but they can’t provide information on ozone level. In mapping the ecological spaces or environmental vulnerabilities, obtaining local knowledge provides an understanding of different realities. For example an area might be considered a vacant land, a walking space or playground, or a brownfield. In other words, the results of PGIS activities are largely dependent on participants’ knowledges, experiences, and impressions. Incorporating different layers of local and expert knowledge results in what planning calls “ground truth” (Pickles, 1995).

Before the focus group I will make my GIS analysis results (standard analysis including environmental features, socioeconomic and health factors) available to participants and the community via the Internet. Hard copies of the results will also be distributed to the participants and during neighborhood meetings. During the focus group, the community discusses the maps, a participatory map will be created, and the main factors for the analysis will be selected. This map will also be stored in GIS. The results will be available to all participants for further comments or feedbacks.

References

where it is—in auto-oriented suburbs—and create and support transportation options that allow older Americans
to become and remain healthy so they can continue to contribute to society as part-time workers, grandparents,
mentors, and volunteers. The most common travel mode of older people is overwhelming the car; we must
support ways to allow older people to drive safely or get rides when they cannot drive, while taming the car’s
destructive power. The second most common travel mode for older people is walking—even where they cannot
walk to shop or conduct personal business, as in Active Adult Retirement communities. Making the suburbs more
walkable, even if not more dense or having mixed land uses, is a crucial step in creating healthy communities.
Encouraging the neighborhood delivery of services and goods, as in monthly health clinics or weekly produce
markets, is a useful complement to other approaches. Providing age-appropriate public transportation is also an
option—but not the most important one, no matter how much we’d like to think it is—because it will never be
sustainable to provide transit in low density suburbs. In the future those who become 65 may live in dense,
mixed use communities, but in the next two decades we will have 50 million plus older people, most living in low
density places—we cannot abandon them because there is no perfect solution. The paper describes interventions
that have addressed these issue or may have the ability to do so.

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Abstract Index #: 495
SHADE, HEALTH AND THE BUILT ENVIRONMENT: HOW BEHAVIORAL FACTORS CAN INFORM NEW SHADE POLICIES
Abstract System ID#: 897
Individual Paper

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The layout of the built environment plays an important role in creating shade and protecting urban residents
against overexposure to sun radiations (Parisi & Turnbull, 2014). As a result of global warming concerns, many
cities and other jurisdictions have developed shade-related policies and programs as part of climate adaptation
plans. The effectiveness of these policies however depends on behavioral factors, physical characteristics of
neighborhoods and socio-economic factors (Buller et al., 2011). In this research, I examine the factors that affect
whether and how shade is used by people engaged in urban outdoor activities. The results of this research can
inform urban planners and public health professionals about built environment interventions that would advance
sun-protection.

We applied a mixed method approach. First, we selected a sample of neighborhoods across Denver based on
morphological characteristics and SES. We analyze urban landscape design rules relevant to these neighborhoods
for sun safety considerations. Next, through shade auditing and direct observation techniques we developed an
inventory of the existing shade and identified users behavior in relation to different types of shade created by
natural and built features (Whyte, 1980). We further explored why users have different preferences for shade by
interviewing a sample of neighborhood residents. We applied both qualitative and quantitative methods to interpret these data and draw conclusions.

Our preliminary results suggest that shade desirability for urban residents is a function of the type and quality of shade, the aesthetic characteristics of the surrounding environment and the ambient temperature. Users’ socio-economic status as well as their knowledge about or prior experience with skin cancer are main determinants of their shade-seeking behavior while engaging in outdoor activities. Landscape design rules are found to contain little reference to sun safety, and there is considerable opportunity for consideration of behavioral factors in further rule development.

References
urban food planners could use incentives to increase health food access in low-income community by encouraging Trader Joe’s (a very popular grocery food retailer in Philadelphia) to open fresh food bars or counters in the seven-eleven (i.e., convenient stores located quite broadly in Philadelphia).

This research on reshaping conventional food system to achieve community food security would provide a unique perspective to food planning education and practice. It would add more tools to food planner’s toolkit to enhance community and regional food security in a more broad and effective way. This study would provide valuable insights on how to collaborate conventional food system, community food system, and public food system together to pursue community food security and sustainable development.

References


ROLE OF THE BUILT ENVIRONMENT AND NEIGHBORHOOD SAFETY IN FALL INCIDENTS AMONG OLDER ADULTS

Abstract Index #: 497

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Background: Falls are known to have a strong and negative association with active living and well-being among the aging population (Ageing & Unit, 2008). Every year, a third of people age 65 years or older in the United States experience falls, which are the leading cause of both nonfatal and fatal injuries for older adults (Stevens & Sogolow, 2005). Fall-based injury may lead to a decrease in physical activity, quality of life and social interaction. In addition, fear of falling resulting from previous falls may even prevent older people from leaving their home. Injuries from falls can also affect their individual health and mobility limitations (Rubenstein, 2006). Although personal-level risk indicators of falls have been well documented, relatively few studies have focused on the urban spatial characteristics of falls, as related to crime, traffic-safety, walkability, transit-accessibility, and the built environment at the community level.

Objective: The aims of this paper are to (1) investigate the geographical hot spots of fall incidents at the community level, (2) identify detailed risk factors of falls in terms of the built environment, socio-demographics, walkability, and other safety problems at the neighborhood levels.

Methods: This study examined locations of fall incidents (2011-12) by the Emergency Medical Service (EMS) and San Antonio Fire Department, Texas. We focused on two levels of falls in this study, total falls (26,645 incidents) and intersection-based outdoor falls (964 incidents). The spatial unit of analysis was the census tract for the neighborhood-level analysis. For understanding the hot spots of fall incidents among older adults, we measured fall rates, based on total fall incidents per over 65 years and over population at the census tract level. To analyze the environmental risk factors, walkability, and other neighborhood safety conditions, we used GIS data, Walk Score™, Transit Score™, and crime and crash incidents data. GIS was used for capturing built environment and infrastructure/facilities (i.e., land use mix, street connectivity, destinations, traffic, tree canopy, and presence of sidewalks), and socio-demographic environment (i.e., population density, insurance rates, income, race, and age). Walk Score™ provides a score ranging from 0 to 100 calculated based on the density and proximity of destinations. Transit Score™ locates the nearest public transportation stop on the route, the frequency of the route, and type of route. We will use negative binomial models to analyze the effects of neighborhood environments and safety on fall incidences using.
Results and conclusions: High traffic volume, high speed, and lack of sidewalks are related to increased outdoor fall rates. Walkability and transit-accessibility are also related to increased falls after controlling for socio-demographic variables, as accessible environments attract more walking and street activities. The analysis of violent crime or property crime, and pedestrian involved crash will be tested to see the relationship between fall incidence and neighborhood safety. The findings will help develop the foundation of understanding falls-related risk factors in the neighborhood environment, which can be especially beneficial to health and quality of life for older adults who are at the highest risk of falling and being injured from falls. In terms of the fall-related cost burden to the U.S. health care system, these findings help policy-makers develop a guideline to create aging-friendly neighborhoods and implement effective ways to reduce fall-related environmental risks. Hot-spot maps of fall incidences can serve as useful resources for healthcare/EMS providers, as well as researchers, by clearly showing locations of concentrated falls and facilitating proper interventions to make necessary modifications of any hazardous conditions associated with specific hot spots.

References

Abstract Index #: 498
OVER-REGULATION AND UNDER-INVESTMENT: PLANNERS’ RESPONSE TO COMMUNITIES’ EFFORTS TO STRENGTHEN FOOD SYSTEMS
Abstract System ID#: 958
Individual Paper
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The last two decades have witnessed the rise of a national movement to revitalize, re-localize, and rebuild communities’ food systems. The number of community gardens, urban farms, farmers markets, community supported agriculture farms, etc. are but a few of the signs of a growing food movement (Hodgson et al. 2011). This food movement, which arose out of concerns for food security, social justice, and economic justice (Gottlieb and Joshi 2013), emerged with little to no involvement of planners. Indeed, in a well-cited article, planning scholars Pothukuchi and Kaufman (2000) wondered why food was a stranger to the planning table. Today, however, food is no longer a stranger to planning.

In the last decade, planners and local governments across the United States have responded to calls for action by engaging in food systems by deploying a host of planning and policy tools (Hodgson 2012; Neuner et al 2011; Raja et al 2008). Some local governments are preparing comprehensive food systems plans while others are offering tax incentives to foster their communities’ food businesses. This is, some would argue, a heady time for food systems planning. Yet this turn in planning warrants great caution about the purpose of local government planning intervention in the food system and, therefore, great clarity about the means by which they do so.
This paper critically examines contemporary local government planning intervention in the food system. Drawing on cross-sectional data from a 2014 national survey of APA members (n=1,169) who work for local governments, this paper describes how local governments in the United States are heeding calls to use public policy and planning to intervene in their communities’ food system. Although planners report that local governments are engaging in food systems planning – about 13% of respondents reported food systems planning as a significant priority in their work – they are doing so with a narrow understanding of their role. Specifically, local governments are using policy tools to regulate and control rather than invest and revitalize communities’ food systems. Logistical regression models highlight the factors most likely to explain choice of particular policy tool in addressing food system concerns. The paper concludes with cautionary notes for the future of food systems planning, and offers suggestions on how planners may broaden their approach to strengthening their communities’ food systems.

References

Abstract Index #: 499
THE IMPACT OF FRAGMENTED GOVERNANCE ON HEALTH DISPARITIES AMONG RACIAL MINORITIES
Abstract System ID#: 981
Individual Paper

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Advocates of public choice theory argue that the fragmented governance promotes competition among local governments, and achieves economic and allocative efficiency by providing more customized public goods and services at the local level. Scholars tested if fragmented and decentralized governance is associated with a decrease in public expenditure, but found mixed results depending on measures of political fragmentation, which refers to the process of redistributing functions and powers away from central authority. Unlike those studies focusing on economic efficiency, few studies have examined the association between political fragmentation and population health from the perspective of social equity. This study aims to explore the development of political fragmentation along with population increase and urbanization in the US, and to conduct empirical tests, which illuminate the mechanism between fragmented governance, racial segregation, and population health.

This study examines a link between political fragmentation and racial disparities in mortality rate analyzing historical data of local governments, population, and mortality in the US metropolitan areas when political fragmentation occurred frequently. The longitudinal study identifies the causal relation between political fragmentation and health disparities among racial minorities in metropolitan areas. The spatial data also allows me to discover the more detailed channel from political fragmentation to health outcomes by focusing on cause-specific mortality and specific areas that experienced a dramatic transformation in urban governance.

I use as independent variable political fragmentation indices by applying different measures that prior studies have employed over 381 MSAs in the US from 1970 to 1988. Dependent variables include age specific mortality rates and racial difference of mortality rates, which would result from urban governance. I use a fixed effect...
Poisson model controlling for income, education, racial segregation, population density, and other variables that show significant correlation with fragmented governance and mortality rates.

The empirical results of this study explain the mechanism that political fragmentation accelerated racial segregation, which in turn led to racial disparities in health as the residents in the racially segregated communities were less exposed to the resource of health promotion, educational opportunity, and other public services. Contrary to the more fragmented local government that seeks uniformity, the less fragmented governance appears to promote diversity and upward mobility among racial minorities, and to contribute to stronger integration of economy, race, and education. The findings suggest that political fragmentation deteriorates racial difference in community health although it remains controversial as to whether fragmented governance improves competitive and allocative efficiency.

References


Abstract Index #: 500

THE LEGAL CONSCIOUSNESS OF FOOD SYSTEM POLICY IN THE MADISON, WI RURAL-URBAN INTERFACE

Abstract System ID#: 994
Individual Paper

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Generally speaking, there are two types of food systems in the United States: mainstream (i.e., commodity agriculture) and community-based (i.e., food produced and consumed in the same regional area). Federal, state, and local governments have focused on policies that support the mainstream food system for most of the 20th century, where federal policies address the economic conditions of farming and state and local regulations zone land for agricultural uses. Since Kameshwari Pothukuchi and Jerome Kaufman’s seminal article on the food systems planning in 2000, local governments have increasingly recognized the importance of community-based systems and used their police power to permit farming practices throughout their cities.

When you compare the scope and influence of federal policies to state and local regulations, it is clear that the federal government dominates food system policy for both mainstream and community-based systems. There are several reasons for this condition but the primary factor is the Farm Bill because it permits the U.S. Department of Agriculture (USDA) to subsidize income and crop insurance if farmers produce commodity crops. This guarantees a stable income for mainstream farmers and does not provide the same benefits to community-based farmers. Most state and local governments implement policies and programs to preserve farmland but do not address what the farmers produce or whether it is economically viable. In other words, state and local food policies primarily view agriculture as a land use and not as an industry, yet farmland preservation studies recognize that landowners need a financial incentive to use their land for agriculture.

This disparity has driven my interest in food policy and more specifically, the ability of local governments to promote community-based food systems in the rural-urban interface through exercising their police power. The paper presents the findings from a pilot study on four Fairshare CSA Coalition farmers within the rural-urban interface of Madison, WI. It analyzes how they perceive and interact with federal, state, and local food system policies. The objective is to document the web of laws that influence farmers in the Madison area and to
understand the effects of existing initiatives. The study applies an inductive approach understanding food policy and it is based on a document review of federal, state, and local policies and farmer interviews.

Robust food systems require robust land use policies, and I hypothesize that the existing methods are not an effective way to facilitate community based food systems. It is important to evaluate federal, state, and local policies together because food systems are complex and multiple regulations not only affect each component of the system but also a single parcel of land. This analysis yields valuable insight for state and local governments that want to promote agriculture in their rural-urban interface.

References

Abstract Index #: 501
EXPLORING THE RELATIONSHIP BETWEEN HEALTHCARE ACCESSIBILITY AND URBAN SPRAWL
Abstract System ID#: 1015
Individual Paper

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Background:
When measuring healthcare accessibility, an important variable to consider is the spatial distribution of urban patterns, in particular urban sprawl. Using Florida as a study area, this study explores the relationship between measures of urban sprawl and healthcare accessibility. Specifically, this study presents an enhanced methodological approach utilizing spatial measures of accessibility and urban sprawl.

Study Design:
The methodological goal is to relate traditional measurements of accessibility (travel time) to urban sprawl measures of statistical significance. Urban sprawl measures are adopted from Galster et al (2001) and Tsai (2005) who employ metrics to describe land development spatially. A linear regression model is used to explore the relation of healthcare accessibility to urban sprawl. Independent variables include size, density, clustering (concentration), and centrality of the residential areas. The depended variable, travel time, is represented by drive time areas which are delineated using network analysis to calculate travel time from residential areas to the nearest healthcare provider.
The 2010 census blockgroups are used for population data and Florida property parcel data are used for the residential areas information. Primary care physician (PCP) data available from American Medical Association (AMA) are used to map the location of healthcare providers.

Preliminary Results:
Initially the model is applied at a single county level. At this level the linear regression model results suggest that urban sprawl is significantly associated with increased travel time of residential areas to healthcare providers. Higher correlations are observed in particular with variables of density and clustering pattern (p<0.05).

Conclusion/Contribution:
This study develops methods that incorporate urban sprawl measures into the estimation of healthcare accessibility. Further application of this methodology to the rest of US will contribute to further understanding of healthcare accessibility and spatial urban development that affect communities and residential clustering or sprawl patterns, in particular regarding health disparities and access to health care for specific populations.

References

DID DATA FROM THE GULF OIL SPILL CONTRADICT OFFICIAL PUBLIC HEALTH ANNOUNCEMENTS MADE DURING THE DISASTER?

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The US Environmental Protection Agency (EPA) concluded that air emissions from the 2010 Gulf oil spill caused temporary irritation but no long-term public health impacts. The purpose of our study was to examine whether air quality data gathered during the oil spill supported EPA’s conclusion. Fine particulate matter and benzene were the selected pollutants. The study analyzed data gathered during the oil spill and compared the results to the Air Quality Index, Clean Air Act standards, National Air Toxics risk assessments, health-based guidelines, and background levels. By all measures, particulate matter and benzene were generally higher during the oil spill than during previous years, and both exceeded all relevant health-based standards and guidelines in all of the parishes studied. Fine particulate matter and benzene levels in six Southeast Louisiana parishes were high enough during the oil spill to cause short-term and long-term public health effects, with disparities in coastal areas that were closer to the spill. These findings raise questions about the adequacy of official communication to the public about the environmental health risks associated with the Deepwater Horizon oil spill.

References
FROM WALKING ON THE RAIL TO USING THE TRAIL TO GET TO SCHOOL: GREENWAYS AS AN ACTIVE NEIGHBORHOOD DESIGN STRATEGY FOR SCHOOLCHILDREN

Abstract System ID#: 1067
Individual Paper

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Children’s advocates have argued that planners should give special consideration to the needs of youth as the neighborhood plays a significant role in a child’s development (Berg & Medrich, 1980; Ward, 1978). Unfortunately, children are not spending as much time outside and they are not as active as they have been in past generations (Freeman & Tranter, 2011). As a common planning practice, active neighborhood design strategies have traditionally included green spaces for children to recreate. Though green spaces are well established as environments that support children’s recreation, greenways are often viewed as an amenity for adults. There is a lack of research featuring youth and ethnic minorities as greenway users (Starnes et al., 2011). Other than home, schools are a major destination for children traveling within their community. Therefore, greenways routed nearby school properties serve as an ideal setting to explore youth and children as trail users.

Though limited research exists concerning schoolchildren using greenways for recreation, there is a gap in the literature concerning whether greenways can serve as an environmental support for children’s active travel to school. Even though there is not literature focusing specifically on greenways as a safe path to school, I build off of two distinct and extensive bodies of literature on greenways (e.g., Starnes et al. 2011) and active travel to school (e.g., McMillan, 2005) as foundations for my study. My research determines to what extent youth and children are greenway users and if they are using the local greenway to travel to school.

I focus on a greenway in Whittier, California because it is routed nearby several schools. Also, it is an urban area with sufficient density where children’s active travel to school is more likely to occur than in more rural settings. To determine children’s greenway use and active travel behaviors, I employed survey methodology at three schools. I adapted the nationally recognized Safe Routes to School survey to include greenway use and behaviors questions. As the population characteristics of the schools are largely Latino, I distributed surveys in both English and Spanish.

An analysis of the survey results reveals that both children and youth use the greenway as a recreational amenity. The high school students’ most common use of the greenway was traveling to destinations within their community. From a sample of active travelers, the results show that greenways may make it easier for high school students to walk or cycle to school compared to walking or cycling through neighborhoods. In terms of policy implications, evidence from this research suggests that a greenway intervention near schools may be a viable strategy worth further testing to promote active travel to school in other communities.

References


Effects of planning programs and services on communities and their vulnerable populations requires careful consideration of a variety of factors, including social, economic, and health data (Lindell & Perry, 2004). Social, economic, and health data can be used to develop indicators that can influence decision-making and measure policy effects, including indicators that are of high priority for sustainable planning (Litman, 2007). This paper reviews development of vulnerability constructs that integrate socio-economic-health measures (e.g., Burton & Cutter, 2008; Schmidtlein, et al, 2008; Tate, 2012). The paper then describes how these types of data sources have been utilized by local agencies engaged in various aspects of community planning in the El Paso, Texas Metropolitan Area. Next, the paper describes how five major planning documents—including transportation, comprehensive, community risk and fire protection services, and health assessment plans—either used or did not use social, economic, or health data, including specific examples of data types and sources and how they were actually used in the plans. Additional data needs are also described based on review of available sources. Six recommendations are presented for improving social, economic, and health data availability and use in agency and research applications, including training on data utilization, enhanced inter-organizational communication, improving third-party data access, formal relationships with data research centers, identifying relevant variables and underlying constructs with particular local applicability, and increasing data utilization in local planning analyses.

References

Abstract Index #: 505
ACCESS TO HEALTHY FOOD RE-CONCEPTUALIZED: EXPLORING THE FIVE DIMENSIONS OF ACCESS
Abstract System ID#: 1100
Individual Paper

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Although the construct ‘access’ is used frequently across many fields of practice and study, it remains inadequately defined (Penchansky and Thomas, 1981; Ribot and Peluso, 2003). In some contexts access is conceptualised as entry into or use of a ‘thing’ — a product or service. While in the context of local food policy, access is conceptualised as a broad set of ‘strands’ or an aggregation of factors that influence residents’ ability to acquire and benefit from healthy food (Penchansky and Thomas, 1981; Ribot and Peluso, 2003). However, in the on-going discussions on urban food systems, access is defined solely by objective measures such as socio-spatial analysis, pricing, availability and volume. Qualitative methodologies are rarely utilised leaving elements of perceived food quality, ideas about area crime and store environment out of our food access equation. Consequently, we are left with only a partial view of access even though it remains a crucial element that impacts food policies and ultimately, the health and well-being of families (Alkon et al., 2013; DeLind, 2006; McCormack et al., 2007; Raja et al., 2010; Walker et al., 2010).

Through results from semi-structured interviews of key stakeholders involved with the Healthy in a Hurry Corner Store Initiative and researcher-administered survey questionnaire of randomly selected households in four Louisville, Kentucky neighbourhoods, this paper re-conceptualises access on five dimensions of perception — Acceptability, Accessibility, Accommodation, Affordability and Availability. Finally, this research paper submits that future food access policies should consider the Three Pillars of Access as a model to guide planners and policy analysts.

References

Abstract Index #: 506
MAPPING AND MEASURING HEALTH CARE DISPARITIES: INTEGRATING SPATIAL AND NON-SPATIAL FACTORS TO ASSESS ACCESSIBILITY TO PRIMARY HEALTHCARE PROVIDERS

Access to primary health care plays an important role on achieving health equity and preventing chronic diseases in the U.S (Gordon-Larsen et al, 2006). Access to healthcare involves both spatial and non-spatial factors. Spatial access includes geographic distribution of healthcare providers in geographical areas; whereas non-spatial access is affected by geographical barriers that limit a user’s availability to access care and are typically measured by socioeconomic factors (Wang and Luo, 2005). However, there are only unclear definitions of reasonable access: improving the spatial accuracy of measuring accessibility and equity of accessibility to health care services.

This study aims to address two research questions: 1) What is the spatial extent of accessibility that can allow general population to access primary care? 2) What non-spatial factors are associated with healthcare disparity and how do they affect accessibility? This study presents a methodological framework to combine spatial and non-spatial factors to assess the accessibility to primary healthcare providers.
To answer these questions, this study analyzes the accessibility in Jacksonville Metropolitan Statistical Area (MSA), Florida. Availability of healthcare services is developed using a cluster analysis and by calculating travel time based on the location of primary physicians. Next, the study investigates the effects of socioeconomic factors identified in the literature and uses z-scores to understand how detailed aspects of non-spatial attributes are associated with spatial healthcare disparity. Percentage of population under unemployment, below poverty, without health insurance coverage, non-English speaking, and limited education are used as indicators that affect healthcare disparity. Finally, spatial and non-spatial factors are integrated to identify areas with poor access to primary healthcare using a suitability model.

The population and socioeconomic data are from the 2010 Census, and the primary care physician (PCP) data are provided by the American Medical Association.

The results show PCP clustering in the central and also the periphery of the urban core of Jacksonville MSA. However, after consideration of both spatial and non-spatial factors, about 27.4% of population were experiencing poor access to PCPs and they were concentrated in the periphery of urban core. These areas exhibit inadequate spatial access as non-spatial disadvantages associated with socioeconomic status, which can lead to a shortage of healthcare providers.

References

Abstract Index #: 507

URBAN PLANNING AND DESIGN FOR SAFER COMMUNITIES

Individual Paper

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Residential environment improvement projects of aged and poor residential areas that are conducted recently have objectives in improving residential environments and vitalizing communities. However, although projects of residential environment improvement cooperating with community involvement bring positive effects on forming a sense of community, they have limits on ensuring safety in public places. This means that if people feel unsafe in using public spaces, the projects not only fail in developing successful residential areas, but also produce difficulties in forming a sense of community. Therefore, in this research, it has objectives in identifying urban planning and design elements that consider public safety and developing safer communities through planning elements that are related to natural disaster, crime, and physical illness.

Method of this research is to draw planning and design techniques for safer communities and to suggest ‘Safer Community’ model, by actually applying those techniques to selected target area.
The three urban planning elements for 'Safer Community' model are: safe communities from natural disaster, crime, and physical illness. All three planning elements emphasize forming a sense of community, and planning elements for safe communities from natural disaster include urban design techniques such as reinforcing building structures, detention facilities, educations and public relations, and natural disaster reduction facilities. Planning elements for safe communities from crime include design techniques such as reinforcing territoriality, access control, natural perception, strengthening activity rate, and maintenance control. Lastly, planning elements for safe communities from physical illness include design techniques such as inducing physical activity rate and healthier eating habits, and developing safer neighborhoods and pleasant pedestrian environment. Therefore, this research develops a safer community by applying these three planning elements and fourteen design techniques to target area, and it suggests different community models on each elements.

This research is significant in applying three safe planning elements, from disaster, crime and physical illness, that were not covered by formal residential environment improvement projects, and utilizing it as a base research for safer community.

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Abstract Index #: 508
PUBLIC HEALTH IMPLICATIONS OF NEIGHBORHOOD SAFETY
Abstract System ID#: 1143
Individual Paper

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BACKGROUND: Neighborhoods are the most frequently used places for physical activity (PA) including walking. Actual and perceived dangers may affect these behaviors. Neighborhood safety is an understudied determinant of health, requiring urgent attention, especially given the association of preventable injuries and fatalities with environmental hazards.

OBJECTIVE: We examined multiple domains of neighborhood safety as important predictors of health-related outcomes among adults aged ≥50 years.

METHOD: Surveys (n=394) were administered in the spring and fall of 2013. Participants were recruited from the patients registered in a regional healthcare network serving Central Texas. The survey provided personal demographics, socioeconomic status, health status/behaviors, socio-behavioral factors, and residential self-selection) and neighborhood perception variables. Neighborhood safety was assessed for four domains: (a) traffic: e.g., volume, speed; (b) crime: e.g., visibility, lighting; (c) physical hazard: e.g., broken sidewalks, fear of falling; and (d) socio-behavioral risk: e.g., distracted drivers, drunk people. Walk Score™ provided an objective,
accessibility-based measure of neighborhood walkability and was derived from areas around each survey respondent’s home.

The outcome variables included both health behaviors (PA, any walking, recreational walking, transportation walking) and health outcomes (physical health, mental health, depression). All but the PA outcome variable were binary, and logistic regression was used to predict the odds of walking ≥1 time/week vs. not; having good vs. poor (feeling not good ≥1 day past month) physical/mental health; and feeling depressed ≥1 day/week vs. not. Linear regression was used to predict days/week with ≥30 minutes of PA in the neighborhood.

RESULTS: After controlling for personal factors, the traffic safety domain was most important for all walking variables. Crime, physical hazard, and socio-behavioral risk domains were more important for physical health, mental health, and depression. PA was not strongly related to any of the safety domains. High Walk Scores were associated with poor mental health.

Traffic Safety domain: Sidewalks were positively associated with physical health, mental health, and transportation walking. Crosswalks/pedestrian signals were positively related to all walking and PA outcomes. Respondents who walked for recreational purposes were more likely to perceive high traffic volume and exhaust fumes.

Crime Safety domain: Proper lighting was linked with more transportation walking and good mental health. Being able to see and speak with neighbors while walking was associated with more PA, recreational walking, and lower depression.

Physical Hazard domain: Broken sidewalks and fear of falling were correlated with poor mental health and depression, while drainage related issues (ditches, standing water, and flooding risk) were associated with depression only.

Socio-behavioral Risk domain: Several variables were negatively correlated with mental health including distracted drivers, lack of driver respect for pedestrians/bicyclists, drug activities, drunk people, and ease of getting lost. Perceptions of drug activities were also associated with poor physical health and depression.

CONCLUSION/IMPLICATIONS: Several domains of neighborhood safety were associated with health-related behaviors and outcomes. Improving traffic-related safety (e.g. installing crosswalks, pedestrian signals, and sidewalks) appears most promising in encouraging walking. This is especially true for recreational walking among middle-aged and older residents of small cities. Smaller cities typically have limited destinations to support transportation walking. Reducing crime risks (e.g. installing proper street lights, improving police surveillance) seems important for improving overall and mental health. Socio-behavioral risk factors (e.g. driver behaviors, wayfinding) in neighborhoods appear important as intervention targets for improving mental health.

References
We seek to reduce the risks associated with climate change for permaculture, urban agriculture, and urban forestry by providing new planning approaches and ensemble projections for how future ranges of street tree and specialty crop species may migrate as extreme temperatures change. Many U.S. municipalities will need to replant their urban forests in the coming decade in response to emerald ash borer and walnut twig beetle, in ongoing efforts to apply urban agriculture and permaculture techniques to increase food security and enhance resiliency in urban landscapes, and in developing new economic opportunities for local specialty crops. Incorporating the effects of climate change on these systems is a vital consideration for planners, but has yet to be integrated into contemporary climate or food systems plans. Urban agriculture and urban forestry have largely been separate focus areas, but agroforestry provides a connection between the two. Urban agroforestry is unique in its focus on growing perennial woody food forests, combining the ecosystem benefits of urban forestry with the food benefits associated with urban agriculture. Given the changes that will continue to affect urban environments, contemporary planting plans should consider how species’ ability to grow in specific areas will change in the next few decades as a result of climate change. Our research attempts to reduce the risks associated with making long-term decisions about urban trees and permaculture by providing planners with detailed ensemble projections of future changes in range and yield based on the most recent IPCC simulations, and communicating uncertainties relevant to operational planning activities.

Previous climate planning research has emphasized the effect of changes in precipitation patterns on annual crops. Here we focus on extreme temperature events, a factor more significant than rainfall for perennials and thus far underrepresented in urban climate adaptation plans and research. We employ projected daily temperature across the continental U.S. at 1/8º resolution (8 km) from 20 global climate models and four emissions scenarios for 2040-2100 in the downscaled Coupled Model Intercomparison Project 5 climate projections archive (Reclamation, 2013). These projections are combined with American Horticulture Society Heat Zone and USDA Plant Hardiness Zone classifications to map how changes in decadal extreme temperatures may affect the range and yield of more than 100 tree species and specialty crops, and the composition of symbiotic plant communities employed in permaculture gardens. Results consider both nutrition and ecosystem function. We conclude that U.S. cities would benefit from focusing on heat tolerance when making decisions about new street trees, urban food forests, and specialty crops, with an overall increase in options for new plantings.

References

programs (FMIPs) as mechanisms to increase access to healthy food for low-income consumers and also to channel dollars into the local food economy. However, studies across the US found that FMIP vouchers were often unused due to different transportation barriers. Researchers argued that to solve food access problems we should go beyond increasing the family budget and focus on more structural gaps within the neighborhood e.g. the lack of public transportation, sidewalks, and streetscape (SFC, 2014). However, little is known about how built environment really affect farmers markets’ usage.

To answer this question, this research will use the Sustainable Food Center (SFC) Farmers Market East Austin as a case study area to investigate how the built environment around the market affects its usage. The SFC Farmers Market East is located in the Chestnut Neighborhood in Central Austin, an area that traditionally has been characterized by food scarcity and demographic segregation. It opens year around and on every Tuesday from 3-7pm and on average receive 600 customers per week (SFC, 2014).

To understand the built environment around this market, researchers used GIS to measure the built environment within a half-mile buffer around the location. The spatial distribution and density of different land-uses and the availability of transportation facilities (e.g. bus stops, bus frequencies, bike facilities, sidewalks, intersection, and crosswalks) were quantified. The streetscape around the market was divided into edges and regions based on architectural theory and through computer imaging software. This enabled researchers to analyze streetscape as an arrangement of regions or elements with particular relationship. The market usage data was collected through customer surveys which included their travel information, food purchase spending, and overall satisfaction to the market. Statistical analysis (T-test, ANOVA test, Chi-square test) was used to explore the relationship between built environments and actual food market usage.

Preliminary results showed that sidewalk length, bike facilities, bus stop density, and bus frequencies were positively correlated with the market usage. The appearance of graffiti and fences on streets were negatively correlated with the market usage. Further analyses need to be done to fully understand the impact of built environment on farmers’ market usage in food deserts, which would facilitate local governments allocating limited resources to the communities with the greatest need.

References

EFFECT OF HEALTHY CITY MOVEMENT ON RESIDENTS’ HEALTH OUTCOMES
Abstract Index #: 511
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WHO defines "Healthy City" as continually creating and improving its physical and social environments as well as community resources, in which people can mutually support each other to perform all the functions of life and develop their maximum potential. In this sense, we can assume that a city that adopts and implements the healthy city related policies could provide better health resources in terms of built environments and public services than those without such policies.

With regard to an individual's health, the social ecological model which has emerged in recent years takes into account both internal and external factors, such as biological, behavioral, and environmental characteristics, while the germ theory, which was a dominant idea, claims health-related problems are caused by internal factors only, that is, genetic characteristics and behaviors of an individual person. Particularly, the social ecological model includes political environments as external factors. This is because built environment and public health services, which play a critical role to promote physical activities and health status, are provided through public programs or policies. However, physical environment factors and practical services have been thought as a determinant of
individuals' physical activity and health status in urban planning studies, whereas too little attention has been given to the implication of policy adoption and implementation factors.

From the social ecological perspective, the purpose of this paper is to better understand the relation between a city's health resources and its residents' health outcomes focusing on South Korean case. Health resources include built environment characteristics, health services as well as adoption and implementation of health city policy and related institutions. Health outcomes focus on body mass index (BMI) and self-rated health status. To figure out determinants of individuals' health outcomes, this paper test the impacts of health resources on residents' health outcomes at an individual, a local, and a city level by using hierarchical linear model (HLM). The results can contribute to the innovation of health related public policies as well as urban planning policies, because finding determinants of individuals' health outcomes emphasizes the necessity of modifying related policies at a local and a central level. In addition, it can evaluate present healthy city policies, and can provide improvement direction.

References

Abstract Index #: 512
WALKING, OBESITY AND URBAN DESIGN IN CHINESE NEIGHBORHOODS
Abstract System ID#: 1235
Individual Paper

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China faces growing problems with obesity and chronic disease. In fact, one-fifth of all overweight or obese people in the world are Chinese. Obesity and chronic disease in China has been linked to decreasing physical activity and to other factors, especially changing diets and environmental pollution. In the last two decades, physical activity declined by over 30% among Chinese adults, including reduced walking and bicycling. While rapid urbanization in its current form poses a threat to the health of Chinese cities, it also presents an important opportunity to adopt new, more sustainable, urban development patterns that include urban design that supports active living. There is a pressing need to better understand the link between urbanization and obesity to effectively target interventions.

Chinese cities differ significantly from many Western cities in terms of their urban design. Chinese cities are extremely dense compared to cities in the USA or other Western countries; for example, the density of Shanghai suburbs exceeds that of many urban neighborhoods in Western cities. Also, inward-facing or gated communities are very common in China; a majority of residential buildings are oriented around internal courtyards or lanes, surrounded by gates that create blank or inactive street facades. This design feature reflects historical patterns in which daily life—including some forms of physical activity—was conducted inside the community. It is unclear whether findings on the association between built environment features and walking and other physical activity from Western cities can be directly applied to China.
Research on the links between walking and the built environment in Chinese cities is thin. The few empirical studies conducted have produced some counterintuitive findings: in the Chinese context, high density has been associated with reduced recreational physical activity and increased overweight. Extremely high density may limit open space and parks, leaving little space for walking or other physical activity. Extremely high density may also cause severe traffic nuisances and safety and pollution concerns, which could further discourage walking and other outdoor physical activity.

However, existing research on these issues in Chinese cities have measured built environment features somewhat crudely, for example, at 13 districts for a city of 8 million people. At this level, the density measure may be capturing confounding effects from some unobserved or unmeasured built environment factors.

This paper aimed to expand the fledgling evidence using a more inclusive definition of walking (for both travel and recreation) and employing micro-scale measurements of built environment features at the street segment level. This approach is expected to support a more nuanced understanding of the relationship between the built environment, walking and obesity.

Six neighborhoods with different built environment characteristics, located in the Chinese cities of Shanghai and Hangzhou, were studied. Data on walking and other physical activity and obesity levels from 1070 residents were collected through a street intercept survey conducted in 2013. Built environment features of 527 street segments were documented using the Irvine-Minnesota Inventory-China (IMI-C) environmental audit. Data were analyzed using the State of Place™ Index.

The results confirm the association of built environment features with walking in the context of Chinese urban design. Walking rates, household income and Body Mass Index (BMI) were related; neighborhoods with a higher State of Place™ Index were associated with higher rates of walking.

The associations between "walkable" built environment features and walking established in existing research in other countries, also held true in the case of Chinese neighborhoods.

References


Abstract Index #: 513
RULES FOR REGULATIONS: A HEALTHY COMMUNITIES PERSPECTIVE
Abstract System ID#: 1250
Individual Paper

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We know that one of the most active topics in city and regional planning in the United States is the relationship between the built environment and a range of public health concerns. Land use planning to promote active living and increase access to healthy food, for instance, is viewed as a way to reduce obesity, heart disease, diabetes, stroke, certain cancers, and other chronic diseases. Among the outcomes to date has been the expanding practice of incorporating “healthy community” considerations in comprehensive plans and other planning documents, along with a variety of infrastructure, education, and incentive programs to improve community health. But, as the “planning for healthy communities” movement matures, we are likely to see it include more
regulations: prohibitions against certain things, requirements of others, and “impact fees” charged to developers to address community needs associated with their projects.

Land use and other environmental regulations are constrained by a set of fairly well defined legal principles. But even for regulations with a strong legal basis, there may be policy and political limitations that prevent their imposition. For example, resistance may come from the perception that regulation is bad for the economy. And, there is a general anti-government sentiment that calls into question a wide range of government actions, including regulation.

In the face of these considerations, there may be value in articulating certain guidelines, beyond strictly legal limitations, to shape new regulatory approaches aimed at promoting healthier communities. The core of these “rules for regulations” may be ensuring that regulations actually deliver the benefits on which they were based and that they do so in cost effective ways. But are typical planning practices equipped to provide the kinds of analysis this will entail?

This paper will describe the evolving “planning for healthy communities” movement and the role that regulations are likely to play in its future. It will go on to describe how those regulations might be configured and presented to address resistance to them, focusing on both their health and economic benefits. The paper will also look at how the methods of public health professionals might be imported into planning practice to provide, in effective and efficient ways, “evidenced-based” support for this kind of regulation.

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Abstract Index #: 514

EARLY POST-DISASTER SHELTER RECOVERY IN FRAGILE STATES: A CASE OF THE 12 JANUARY 2010 HAITI EARTHQUAKE

Abstract System ID#: 1260
Individual Paper

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Despite its importance, post-disaster shelter recovery remains an under-researched area. The main purpose of this paper is to understand the challenges disaster survivors face during early shelter recovery in fragile states and the mechanisms they use to overcome these challenges. Our research focuses on Haiti, a country which relies heavily on foreign donors for running its operations. The research is based on fieldwork conducted in three socio-economically diverse communities (PétionVille, Delmas and Canapé Vert) in Port au Prince following the 2010 Haiti earthquake. The paper’s data collection methods include twelve focus groups (n= 63); in-depth interviews (n=54); two Town Hall Meetings; participatory site observation and review of secondary sources. The paper suggests that the most significant shelter-related challenges disaster survivors faced in Haiti after the earthquake included unequal access to shelter and shelter-related resources, lack of privacy, living next to strangers, lack of voice in shelter recovery process, lack of care by their own government, corruption, and evictions. It highlights the importance of leadership, social capital, faith and adaptive flexibility in helping Haitians overcome their shelter-related challenges. It concludes with policy recommendations on shelter recovery for national governments and international aid agencies that operate in fragile states.

References

Abstract Index #: 515

MEASURING TODAY'S QUALITY OF LIFE AND HEALTH TO GUIDE FUTURE PLANNING

Central Theme: This paper asks to what extent quality of life and health indicators are correlated at the neighborhood level in the City of Atlanta after controlling for socioeconomic status. The Atlanta Neighborhood Quality of Life and Health (NQoLH) Dashboard embodies the framework of the conference for health by examining metrics across the city using novel geographic information systems (GIS) data analysis, interpretation and application. NQoLH demonstrates that neighborhood of residence directly affects one’s health outcomes and quality of life, and that both are critical considerations in determining neighborhood planning and health promotion strategies.

Approach and Methodology: NQoLH first develops a multi-attribute neighborhood quality of life index that examines place-based amenities and the social and physical environment at the neighborhood level. Second, the study assesses the status of neighborhood health based on measures of healthy food access, physical activity, and mortality and morbidity in neighborhood populations. Finally, the study compares the indices across the 25 Atlanta neighborhoods grouped by a socioeconomic status index.

Results: The results show that:
1) The relationship between neighborhood quality of life and health in Atlanta is significant; and
2) Neighborhoods with relatively high quality of life and high health indicators are found in all socioeconomic neighborhoods categories.

Relevance to Planning Education, Practice or Scholarship: The neighborhood indicators identified in this study can be used as a benchmark tool to aid policy and resource allocation decisions at the municipal scale. While this data-driven case study is based in Atlanta, the GIS analysis and interpretation of data is replicable in other cities. Participants will answer place-based questions through an exercise using the interactive NQoLH website. This experiential learning exercise enables participants to adapt the NQoLH dashboard to other regions and identify ways of addressing health issues as they relate to specified social and physical environments.

References


Abstract Index #: 516
URBAN AGRICULTURE AND LOCAL CLIMATE: INVESTIGATING THE POTENTIAL OF AN UNEXPLORED URBAN HEAT ISLAND MITIGATION STRATEGY
Abstract System ID#: 1348
Individual Paper

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Extreme heat events are responsible for more annual fatalities in the United States than any other form of extreme weather [1]. Urban centers are particularly vulnerable to the threats of excessive heat as most cities are home to large populations of lower income individuals who often lack access to air conditioning or adequate healthcare facilities. Urban populations are also more likely to be exposed to extreme heat due to the urban heat island (UHI) phenomenon. As the global population continues to urbanize, the number of vulnerable individuals will continue to increase making urban heat island mitigation strategies all the more important.

This research explores urban agriculture as an urban heat island mitigation strategy. Though previous work has examined the role of vegetation in mitigating the UHI effect [2], the potential of urban agriculture as a mitigation strategy has yet to be investigated. This paper presents the results of a land cover analysis, which investigates the climate effect of converting the existing urban land cover to urban agriculture. The research is conducted in the city of Atlanta, GA, as Atlanta has one of the fastest growing urban heat islands, and has exhibited significant increasing trends in heat waves [3].

This paper is a continuation of previous research that investigated the conversion of underutilized properties, such as vacant and distressed parcels, to urban agriculture using a local climate simulation model. In this analysis, I employ satellite temperature data and land cover data to estimate how converting land to urban agriculture impacts local temperatures. I also investigate how urban form at the neighborhood scale impacts the relationship between urban agriculture and local climate. As such, I argue that urban agriculture should not only be placed in cities but that the morphology of the built environment should be taken into consideration when selecting locations for urban agriculture.

This research builds on work currently examining the potential of urban agriculture to effectively revitalize neighborhoods with vacant properties and reclaim brownfield sites in urban areas. When designing heat mitigation strategies, it is important for planners and policy makers to quantify the difference between vegetative approaches in order to understand the tradeoffs they are making climatically, environmentally, and socially. As such the results of this research can help guide planners when selecting between vegetative UHI mitigation strategies and may further support the burgeoning urban agriculture movement.

References
SIMCITY IN THE CLASSROOM: EXAMINING GAMING SOFTWARE'S INFLUENCE ON STUDENTS' PERCEPTIONS OF THE FIELD OF PLANNING.

Abstract System ID#: 72
Individual Paper

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Background and Purpose: Educators have been using earlier versions of SimCity and other simulation software, such as Civilization, in their classrooms for years. SimCity in particular has been used to help teach city/regional planning (Gaber, 2007) and urban geography (Adams, 1998). Through using simulation software, students develop problem-solving skills and what Gaber (2007) refers to as adaptive critical thinking skills, where students must respond to changes in the game and make decisions on how to proceed. The latest version of SimCity resolves a weakness that was present in earlier versions of the game; this latest version allows for interactive play among students, where the decisions each student makes while playing can have lasting effects on their classmates' simulated cities. For this study, the researchers sought to examine whether the inclusion of SimCity in introductory planning courses leads to students having greater interest in the course itself as well as the larger field of study. The results of this study can help faculty in planning programs decide whether to use this software as a teaching tool.

Objectives: The study sought to compare students perceptions of the field of planning between two groups: students in a regular Introduction to Planning course and students in an Introduction to Planning course that included the use of SimCity in course activities and assignments.

Methods: The researchers administered a survey at the beginning and end of the semester to students in two courses: a regular Introduction to Planning course and an experimental Introduction to Planning course. The experimental section was identical in coursework to the regular section except that it also included SimCity assignments. In total, 211 surveys were administered. The surveys asked about students’ perceptions of planning as “boring,” “fun,” and “creative;” their overall interest in planning; and their likelihood to take additional planning classes.

Results: Before taking Introduction to Planning, students in the “normal” condition (no SimCity) were statistically significantly different from the SimCity condition. The “normal” condition students reported a greater overall interest in planning and they indicated they were more likely to take additional planning classes. The end-survey indicated that the normal condition students no longer differed from the SimCity students on those two measures. However, differences in two additional measures emerged: the SimCity condition students reported perceiving planning as more fun and more creative than their normal condition counterparts. Between the beginning and end of the course, the SimCity condition students’ perceptions of planning as fun and creative changed in a positive way (seeing planning as more fun and more creative), and this was statistically significant. However, there were no statistically significant changes in how likely the SimCity condition students were to take additional planning classes; their interest in planning; or their perceptions about how “boring” planning is. Within the normal condition, the only statistically significantly change between the beginning and end of the semester was in the students’ interest in planning. Students reported a statistically significant decrease in their interest in planning between the beginning and end of the semester.

Implications: These findings suggest that the inclusion of SimCity software in an introductory planning course may lead to students perceiving planning to be more fun and creative. However, these perceptions do not appear to relate to students’ overall interest in planning or their likelihood to take additional planning courses. Researchers should use this as a starting place to examine what factors, then, would help students to become more interested in planning.
References


Abstract Index #: 518

MAPPING THE RESEARCH DOMAIN, COLLABORATION AND IMPACT OF U.S. PLANNING SCHOOLS FROM 2000 TO 2014

Abstract System ID#: 216

Individual Paper

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Urban planning is complex and multi-faceted, far too much a singular definition or approach. The diversity within planning is rooted in planning’s simultaneous occupation of multiple worlds. Based on previous research on methods to examine research domain of urban planning, this research paper is focused around three questions: (1) How to measure the major research areas of planning? (2) How are these major areas connected (e.g., collaboration among institutions)? (3) What are the most active and impactful areas, authors, and institutions?

Using approximately 3,000 publications (SCI, SSCI, and A&HCI from 2000 to 2014) of 439 planning faculty members (based on the faculty list from ACSP Guide) in top 25 U.S. planning schools (based on school rankings from Planetizen Guide), mixed method approach is employed including (1) bibliometrics study of publications by categorizations, specializations, and keywords, (2) qualitative assessment of the correlations of the research areas and planning schools by using social network analysis such as Aduna Cluster Map, and (3) activity-diversity-impact analysis to measure both the productivity and impactfulness of planning faculty and school, which includes variables used by National Research Council such as total number of planning faculty, total number of articles published by the faculty of school in last fifteen years, total number of citations to works by the program faculty in the last fifteen years, and density as well as Gini coefficient of distribution of publications and citations.

The on-going changes in knowledge domain, collaboration and impact in U.S. planning have been measured, visualized, and explored. Findings suggest: (1) major research areas and their rising trends in recent fifteen years such as environment and health, physical planning, community development, and cross-cutting areas, (2) stronger collaboration among planning schools and institutions, and (3) activity-diversity-impact correlation in planning domain. Finally, the strengths and weakness of knowledge domain mapping are discussed, leading to a call for other studies using different measures.

References

As online degrees become more common, concerns exist about recreating planning’s experiential and collaborative learning environment virtually. Diminishing budgets, organizational restructuring at universities, new technologies, global student interest, and demand by practitioners support online planning education. The University of Florida embarked on a graduate online degree program in the fall 2012 semester and Arizona State has more recently established an undergraduate online degree. As the two domestic pioneers in online planning education, representatives from both programs will discuss the opportunities and lessons learned associated with establishing, growing, and innovating an online degree program in planning.

Overall, this panel will move beyond the individual course development and delivery process to focus on challenges and opportunities that exist when bringing a collection of courses to scale to offer an online planning degree program. The shared experiences we are assembling will speak to navigating the challenges and building on opportunities by focusing on five benchmarks (leadership, partnerships, infrastructure, engagement, and innovation) that both the University of Florida and Arizona State University are finding critical to successfully building and sustaining a fully online degree program in planning.

This paper will focus on partnerships, specifically maximizing the strengths of existing university/school/department resources and partnering to offset weaknesses in areas of marketing, course development, teaching, and student retention; different types of partnership models (public-private, inter-university, intra-university); opportunities and challenges associated with bringing new partners on board and/or terminating relationships with existing partners as program dynamics change.

Using planning education theory to inform my critical analysis of these characteristics, I will discuss how we can utilize the key concepts inherent to planning theory and practice toward delivering planning education online. According to a recent article in the Chronicle of Higher Education, as programs, particularly at the graduate level, gain infrastructure and expertise in these areas, they are pulling out of partnerships with private sector providers and turning to the expertise inherent within their own institutions. At the University of Florida, this indeed occurred with the graduate online planning degree. My paper will address this transition and its broader implications for partnerships in delivering online education in planning.

References

Case studies are widely used in both practical and academic planning. Case studies on local planning policies, processes, and governance structures are used in the development and testing of planning theories, planning research, and as a teaching tool in planning classes. Each year, hundreds of urban planners, architects, and urban designers visit Canadian cities and return home with policy ideas that are studied, adapted, implemented or used as inspiration in their own cities through policy transfer processes (e.g. Spaans and Louw 2009, Thomas and Bertolini 2014). In turn, Canadian planners have adopted policies from European, Asian, and South American cities. These transnational networks are important tools for policy learning and innovation (Stone 2004).

A major challenge in teaching planning in the Canadian context is the difficulty in finding Canadian planning material for lecture development and reading lists. Typically, readings rely on American theory and scholarship, creating the perception that planning techniques, policies and issues in the US are interchangeable with those in Canada. As planning is context-specific and there are acknowledged barriers to policy transfer (Dolowitz and Marsh 2000, Thomas and Bertolini in press), it is critical to introduce students to planning through the use of case studies that use local governance structures and planning processes. Undergraduate students in particular can understand how projects/policies/programs are initiated, developed, and implemented through the lens of cases in rural areas, towns, and cities in their own provinces.

This paper focuses on the contributions of 31 case studies to Canadian undergraduate teaching in planning. The cases range from research-based to practice-based, small centres to large metropolitan areas, and top-down to bottom-up approaches to planning problems. They are broken down into eight themes: transportation and infrastructure planning, natural resource management, community development and social planning, housing, urban regeneration, participatory processes, urban design, and urban form and public health. The paper outlines the ways in which these case studies can be used to teach students about plan implementation, integrating public participation, managing conflict and disagreement among stakeholders, and transferring policy ideas from one context to another.

References
One of the key challenges for internationally oriented urban planning courses is the difficulty connecting classroom learning to the realities of professional practice. While field-based courses are an attractive option, they are costly and time-consuming for both instructors and students, and are therefore occasional, rather than regular, components of an international planning education. As pedagogy in professional fields shifts towards service learning and experiential education models, international planning educators must develop more flexible, in-class pedagogical techniques that will immerse students in the unique contexts and scenarios they may find themselves in as working professionals.

This paper outlines the theories, pedagogical approach and evaluation of a new teaching methodology for international planning that combines peer-learning with a rich set of international development case studies we co-created specifically for graduate instruction. The publicly available library of case studies were developed based on actual scenarios with international planning practitioners and applied researchers who work with non-governmental organizations, United Nations agencies, donor institutions and government offices from national to local levels. The cases cover major topics germane to international planning, including transportation, housing, water and sanitation, disaster planning, migration and more. The cases are used in-class, requiring students to justify and debate how they would respond supported by assigned readings that cover major theoretical frameworks, research findings, or policy approaches to the case topic.

Based on a mixed-method evaluation (e.g., case specific exercises, a pre-post course survey and concept map comparison, and an end-of-term student evaluation and reflection), initial findings suggest that our methodology allows students to apply abstract development theories and concepts to real scenarios and projects, learn more deeply about the complexities of international planning approaches, and expand their geographic and institutional knowledge base. The methodology also allows instructors to connect theory to practice through robust case studies and to quickly identify which concepts students are struggling to understand or put into practice.

References
All planning students and many others in related fields (e.g. public administration and urban studies) take a required course in planning law. Instructors must make difficult choices about what to cover in these courses because planning law involves a broad range of topics and requires that students gain a basic understanding of a number of legal concepts with which most are unfamiliar. Many of our students will go from these classes to a job in government where they are the only professional planner and are solely responsible for administering the jurisdiction’s land-use ordinances. What these students quickly discover is that issues involving aesthetics – such as design/architectural review, regulation of signs, and historic preservation review -- are among the most frequent, and contentious, matters they encounter. Unfortunately, they also discover, at the same time, that they learned very little about aesthetics issues in their planning law course.

We believe there is a mismatch between the importance accorded aesthetics issues in most planning law courses and the importance of these issues in planning practice at the local government level. In this session, we propose to demonstrate how each of us, teaching in different ACSP-approved graduate planning programs, have integrated teaching about aesthetics issues into the planning law course. While our approaches may differ, each has the same goal: to ensure planning students understand the basic principles and issues that arise in dealing with aesthetics issues at the local government level. These include: best practices and procedures for aesthetics regulations, drafting/amending aesthetics regulations, administration of aesthetics regulations, freedom of speech issues raised by aesthetics regulations, and knowing when to consult the local government’s attorney.

References

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Findings indicate that teaching real estate finance and development within a studio setting is a viable model of instruction in that it provides students with an understanding of the complexities of real estate development, fosters the development of analytical tools and techniques, and encourages students to consider market and financial issues in tandem with physical plan making and architectural design. The paper offers suggestions for improvement to the studio-teaching model and advocates for its replication in real estate and planning curricula.

References


Abstract Index #: 524
INNOVATION IN ONLINE PLANNING EDUCATION: BEYOND THE TECHNOLOGY
Abstract System ID#: 576
Pre-organized Session: Leadership, Partnerships, Infrastructure, Engagement, and Innovation: Online Degree Programs in Planning

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Online education is often touted as “the way of the future.” Because the future is inherent to planning practice, it is only fitting that planning education be delivered online. Yet no longer is it innovative to simply package and deliver one or a series of planning courses online. Innovation in planning education online necessitates the same delicate balance between best practices and risk management as does innovation in planning education in the classroom. And just as innovations in the field influence the way we teach planning, so too can innovations online influence how we re-think planning education on-ground.

This discussion will move beyond the individual course development and delivery process to focus on challenges and opportunities that exist when bringing a collection of courses to scale to offer an online planning degree program, particularly focusing on areas of innovation and engagement. The ways in which technology facilitates these innovations will be explored, recognizing that online program delivery alone does not make for an innovative learning environment.

Technology provides a way to synchronize innovations in the field with innovations in instructional delivery. Innovation then is as much about change management in the theory and practice of planning as it is about keeping up with changes in technology. The up-front commitment of resources and time required of online education often stifles the opportunity for on-going innovation in the online learning environment, and content can fall victim to university-supported Learning Management Systems (LMS). Seeking out strategies to liberate discipline-specific content from the structure online delivery often imposes not only can improve how planning education is delivered online at the course-specific scale, but also opens up the opportunity to package content in various ways to accommodate the growing need for planning education to be more globally accessible.

Planning educators must keep pace with an ever-increasing global rate of change and provide opportunities for students to engage with this rate of change. The virtual world that can be collaborative, democratic, and resilient exemplifies the benchmarks used in planning by which we attempt to shape the world around us. The online learning environment for planning students then can be designed to engage these very characteristics that are fundamental to planning theory and practice, and that are also inherent to the virtual world.
It is increasingly necessary, then, to devise an engagement strategy for peer-to-peer, peer-to-professor, and peer-to-professional dynamics while fostering relationships among and between these different categories of stakeholders—all the while upholding the theoretical and professional threshold set by planning scholarship and practice. This presentation will draw upon experiences gleaned by implementing a graduate degree program in planning, whereby standards (e.g. professional, accrediting, and university-based) have not necessarily stifled the innovative potential of online planning education, but in fact have been innovated by the ways in which online planning education is increasingly delivered. The current reality is that increasing global program demands outpace existing bricks-and-mortar strategies, so new “best practices” are needed as planning education responds more generally through online delivery mechanisms.

To conclude, this discussion will share diverse models of innovation across the many content-areas of planning education and also highlight opportunities for consistencies where impact can start to be measured. Innovation can certainly drive how the leadership (universities, PAB) envisions online planning education; how partnerships facilitate online planning education; and how infrastructure supports online planning education. The challenge lies in designing an engaging online learning environment using change management strategies with content and technology, and connecting a global constituent of stakeholders in much the same way we have engaged innovation in bricks-and-mortar planning education up until the present.

References


Abstract Index #: 525

PREPARING THE FACILITATIVE PLANNER

Abstract System ID#: 632

Individual Paper

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The attraction of socially aware students to the field of planning over the last fifty years has had a dramatic impact on planning pedagogy. Since the advent of advocacy and contestatory planning in the 1960s, planning education has incorporated the role of planner as change agent. In the 1990s a significant inflection point occurred: the introduction of the reflective practitioner, with attention to the attitudes and values of the planner and the planner’s process of learning in action. This paper warrants that another inflection point has been reached in the education of the planner as change agent: the introduction of the facilitative planner. With the awareness of complex systems and the process of emergent change, the planner must be comfortable in the face of not knowing, of not being in control, and must be able to sense what is possible and emergent in the moment. The planner becomes the facilitator of emergent systems change. Using the pedagogy of participatory action research, collaborative learning, and evolutionary systems thinking, the paper draws out the implications for planning education: how to prepare the facilitative planner. The paper illustrates the approach with a case study of 30 planning students and practitioners in a field-based workshop in peri-urban Mexico.

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ASU’s new 100% online undergraduate planning degree – a Bachelor of Science in Urban Planning – offers students instruction in the analysis and synthesis of the physical, social, political and economic issues that shape urban and regional development. Core courses provide training in planning analysis, theory, urban design, and a variety of tools for conducting planning research, including methods such as GIS, surveys, population projections, socioeconomic analysis, visualization, and modeling. These courses provide the basis for municipal planning and review processes, and the skills needed to prepare environmental statements and city plans. Students may focus their elective courses in areas such as neighborhood revitalization, public participation, housing, transportation, environmental quality, hazardous waste, contemporary legal issues, and preservation planning.

The planning degree is supported by a campus-wide infrastructure devoted to online course delivery. ASU now has 10,000 students pursuing online degrees. The majority of students are either overseas military personnel or working students who have completed one or two years of college but never completed their degree. All courses in the on-line degree programs are 7.5 weeks. Planning faculty are currently engaged in modifying existing online courses (“i-courses”), which have been taught for years, and transitioning them from 15-week courses to 7.5 weeks (“o-courses”) to match the online course requirement and schedule. I-courses and o-courses can be merged, so faculty teach one overlapping course. To assist with transitioning to online courses, ASU Online has been created as a separate department with its own staff and IT support, and has a development team that provides financial, technical and instructional support to faculty in their course development.

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My contribution to the session will focus on issues surrounding leadership to advance online degree programs, and the challenges of maintaining academic rigor, fiscal solvency and market access when launching and sustaining online degree programs in planning. It involves addressing simultaneous multiple constituencies, each with very different perceptions of the need for and the form on online learning. These constituencies include the academic faculty who will teach in the program, the university administration that has often very distinct views on the reasons for online learning, alumni who have a deep investment in the more traditional approaches to planning education, and the current and future students who often share the same academic status whether they are online or live learners. There is also the need to interact with the technician aspect of online learning, and also the marketing (which may include a third party vendor). How to achieve success for the online program in the eyes of these multiple constituents requires a leadership strategy as well as a good academic plan. Using several initiatives in online programs at the University of Florida, including the online planning program but also bringing in the example of the larger UF Online initiative, the leadership challenges will be assessed.
Implementing a Community Development Senior Capstone Project Using an Equitable Learning Model
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(All authors have an equal role in this paper; their names are listed in alphabetical order).

In spring 2015, we developed and implemented the Bachelor of Urban Studies Senior Capstone course at the University of Cincinnati. Students were expected to not only study a community development project but also to participate in a seminar with assigned readings (DeFillipis et al, 2010; Spain 2001) and guest speakers—and to be tested on this material. The students chose projects in Cincinnati, Detroit and three Chinese cities covering neighborhood revitalization, transportation planning and urban agriculture. Our main challenge was to create a cohesive and equitable learning environment for a class that was half Chinese and half American. To address this challenge we (1) included Online discussion board activities as a part of the final grade, (2) included Chinese examples as part of class discussion and (3) paired Chinese and American students with a requirement that each student critique his/her “buddy’s” work and act as mentor and mentee at the same time. In the paper we will report on the success of these efforts aimed at creating an equitable learning environment and on the overall quality of the student projects.

References

Specialization in Planning Education: Strengthening the Relationship Between Graduate Planning Education and Successful Planning Careers

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There is an abundance of literature on the core skills and competencies that should be taught in planning schools but there is very little written about planning specializations that should be offered.

While PAB provided some guidance about specializations in the late 1980s and early 1990s, there has been no concerted effort to link specializations back to actual job opportunities and needs in the fields. We offer some thoughts about the possible reasons for this disconnect and provide a model that could give some more insight into the relationship between planning education, planning specializations and planning careers.

For this assessment, we analyzed specializations as noted in all editions of ACSP’s Guidebook for Planning Schools since 1976. In our view, these four decades of planning education programming created the supply side of the US planning education’s market and are base for our discussion of place-based planning education. Furthering an early assessment by Krizek and Levinson (2005) on integrated land use-transportation planning as specialization,
we created (somewhat arbitrary) two groups of schools to represent dominant regional differences; west and non-west and applied a location quotient of planning specializations.

Discussions about planning education probably trace back to 1948. Transformation and responding to a changing profession are reasons noted by Howard et al. (1948) when pleading for a drastic change in planner’s education. Friedmann (1996) pointed out that planning pedagogy is facing a paradigm shift with the needs to implement implicit future trends. Edwards and Bates (2011) revisited Friedman’s call on re-assessing curriculum core requirements while analyzing the change over the past 15 years. In the theme of the 55th ACSP conference and changing job markets, we believe it is time to re-examine the past four decades of planning specializations and present outlooks.

The second tier in our study, a comparison of the latest APA Planners Salary Survey with the specializations that are being offered in planning programs, shows that there seems to be a disconnect between the specializations that planning programs offer and the actual specialized knowledge used by practicing planners. These findings are contrasted to the recent 2015 PLANETIZEN survey to fully comprehend the relationships between planning education, planning specializations and planning careers. In doing so, we present a platform that conceptualizes the planning skills and core competencies needed in matters of context, place, and the size of place.

Further, we present a planning education model that conceptualizes the planning skills and core competencies needed in regards to market demands and planning careers. Lessons learned include the opportunities that a place-based focus in planning education can offer to planning program.

References


Abstract Index #: 530

EVALUATING SERVICE LEARNING IN URBAN PLANNING EDUCATION: OUTCOMES FOR CLIENT ORGANIZATIONS

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This paper investigates the use of service learning in urban planning education, focusing on the outcomes for client organizations. In doing so it will address a major gap in the urban planning pedagogy literature, as well as in the broader literature on service learning. Within the urban planning literature, numerous studies in the Journal of Planning Education and Research and other publications have evaluated specific service learning projects, often at the authors’ own institutions. These evaluations generally focus on student outcomes, in particular the effects on students’ awareness of and sensitivity to issues facing client communities. The “lessons learned” from these studies are typically aimed at enhancing service learning pedagogy in order to improve those student outcomes. Similarly, the vast majority of publications from the broader field of service learning research focus on the relationship between pedagogical approaches and student outcomes.

Improving service learning pedagogy in a way that maximizes positive student outcomes is certainly a worthwhile cause. However, service learning in theory serves a dual objective: providing students with unique, “real-world” experiences (Long, 2012) that “cannot be duplicated in the traditional classroom-oriented education” (Roakes and Norris-Tirrell, 2000, p. 101), and involving them in community service activities that provide positive benefits
to individuals and community organizations. The benefits to community organizations are far less understood, both within urban planning literature and service learning research more broadly.

A few recent studies have taken a more holistic look at service learning in urban planning and related fields, and in the process have identified some benefits and challenges for community organizations. The benefits often go beyond the mere infusion of free student labor, as students can come up with creative solutions to problems and provide a type of expertise that may not otherwise be available to the client organizations (Littlepage & Gazley, 2013; Viswanathan, et al., 2012). Service learning programs that involve direct interaction with community members can also help to build community capacity and create a sense of opportunity (Roakes & Norris-Tirrell, 2000; Angotti, et al., 2011).

Potential challenges identified in prior research include increased expectations for client organization staff, the need to work within academic semester schedules, and differences among student skills, experience levels, and motivations (Angotti, et al. 2011; Littlepage & Gazley, 2013). Recommendations include involving clients in course design (Viswanathan, et al., 2012), better aligning course objectives with organizational needs (Roakes and Norris-Tirrell, 2000), setting realistic objectives and timelines, and establishing clear boundaries between faculty and client roles (Angotti, Doble, & Horrigan, 2011).

My paper will build upon the limited prior research on this topic by directly investigating the outcomes of urban planning service learning projects for client organizations. The primary research questions are “what benefits and challenges does urban planning service-learning present for client organizations” and “how can urban planning service learning better meet the needs of client organizations?”

The research will consist of a survey of urban planning program directors, interviews with service learning instructors, and interviews with representatives of client organizations. The initial survey will identify the prevalence of various service learning approaches in urban planning pedagogy (e.g., full-course vs. component of course, direct vs. indirect service). The interviews will then investigate the benefits and challenges associated with these different approaches, in terms of client impacts, from the perspectives of both the course instructors and the clients themselves. These findings will be evaluated in the context of prior service learning literature to identify opportunities for maximizing the benefits to client organizations without compromising student learning outcomes.

References

Environmental Planners coordinate planning efforts in a wide variety of scales and contexts. Accordingly, environmental planning education needs strategies to create awareness and help students learn the necessary skills to move through these arrays of scales and issues. Teaching environmental planning and design processes to support this transition should help a planning student develop professional capacity and to comprehend the integrative multidisciplinary effort involved in the planning process.

In studio-based education, planning programs need to move students learning from large-scale analysis to site design and back. Courses and projects in environmental planning should help understand how the changes in scale, context, and focus result in different mixes of analysis, concept development, and project proposals. The connection and explicit pedagogical approach needed to establish coordinated efforts and explicit learning opportunities to transition through issues, scales, contexts, and systems opens up multiple questions to address:

- Where to overlap and where to separate programs and courses to address specific areas of interest?
- How to integrate the curricula of connected professions and disciplines to establish learning opportunities and information exchanges?
- How to create awareness of process, analysis, intuition, and sensitivity?
- How is the exchange of information, models, concepts, and disciplinary language handled?
- What is the role of technology in blending rational processes and intuitive perceptions as we change contexts and scales?

This presentation describes efforts connect programs in bioregional planning, environmental planning and landscape architecture. At the same time, these programs establish connections with other disciplines. Sociology, ecological sciences, and applied economics are some of the many frequent collaborators with planning and landscape architecture students. These efforts involve building bridges between colleges, disciplines, and faculty to create collaborative multidisciplinary learning environments.

Together with current successful efforts in collaborative and multidisciplinary projects, this presentation will share some of the challenges and problems in maintaining these connections in place. Curricula adjustments, course load balances, thesis production and faculty research interests are among some of the challenges to build interdisciplinary synergy.

Bioregional planning investigates the mutual interaction between regional landscape ecosystems and the human dimension of settlements and cultural activities. Environmental planning as a major component in the graduate program in landscape architecture looks into the articulation of alternative interventions to inform long term planning considerations. These conceptual ideas are handed over to landscape architects to explore creative interpretations of principles and values identified. Different approaches produce different outcomes, the question is how can a student change frameworks, processes, and develop critical thinking capacities and perspective to understand what to expect from each scale, discipline, or emphasis.

Evidence-based analysis through sound methodology helps establish valid principles to build meaningful scenarios, which produce guiding concepts that result in applicable and implementable projects and plans. This connection has to be clear and well established in the curriculum of environmental planning and landscape architecture. Preparing students to be aware and capable of the interdisciplinary and complex array of scales and issues of planning for sustainable development requires models, process, and skills that can integrate knowledge and technologies to learn and apply information and disciplines in meaningful ways.

References
A DIVERSITY ORIENTED PEDAGOGY: OVERCOMING PLANNER-COMMUNITY CULTURAL GAPS WITH PLANNING EDUCATION

US demographics are changing profoundly. On track to becoming an ethnically/racially majority minority nation by 2050, Latinos are at the forefront of this change. Demographic changes in the general population are not, however, reflected in the ethnic/racial demographics of planners (Dalton 2007), despite "long-standing commitments to fairness and equity" in professional and academic planning settings (Hibbard et al. 2011, p. 3). The growing demographic mismatch in planning suggests ideas about what constitute a livable community (and community values) are changing in ways planning faculty and practicing planners may be unaware of, unfamiliar with, and limited in their means to respond to.

The literature has established that a culturally relevant, place-based quality-of-life continues to remain central to human settlements, yet varies in form and function among communities (Rios and Vazques 2012; Umemoto 2002). While planners and planning can play an important role in working with public and private sector organizations and citizens in creating livable communities US planning culture has changed little (Sandercock 2003; Umemoto 2001), resulting in what I characterize as a socio-cultural mismatch between planners and communities. Currently, accredited planning programs are unable to provide students with the perspectives or curricular focus of an ethnically/racially diverse faculty (Hibbard et al. 2011) as a means of bridging this cultural mismatch. The pace of demographic change in the general population ensures this dynamic will continue and may even worsen.

How, then, might planning schools address this socio-cultural mismatch? Arguably, an ethnically/racially diverse faculty is a distant hope. Bridging this gap will instead more likely come from a pedagogy directed at cultural competency, cross-cultural training, and other diversity oriented courses. This paper seeks to address the potential for a pedagogical and curricular approach to bridging the socio-cultural gaps facing practicing planners in light of the unprecedented demographic changes taking place in the US.

To address this potential, I begin with a literature review to examine pedagogical approaches in other academic fields and identify key terms with which to survey programs of study and curricular offerings of accredited planning schools. Specifically, I ask: what do PAB accredited schools of planning offer in terms of curriculum for diversity oriented courses? This is empirically answered through a survey of accredited planning schools’ programs of study (required, elective, and cross-listed courses) using text-based content analysis for specific terms such as culture, cultural competency, and cross-cultural training. Descriptive statistics are used to identify: what percent of these schools offer courses that address issues of cultural and demographic diversity; what percent offer methodological diversity; what percent teach cultural competency or offer cross-cultural training.

Beyond facts, what can we learn from this research? I will examine the findings to ask how we might address socio-demographic diversity and cultural gaps through planning pedagogy and consider variation across schools and context, commonalities and divergence across programs, the challenge of stretched faculty and departmental resources, and problems that arise from generalizations. Nascent recommendations for increasing
diversity oriented planning curriculum are made, with an eye towards creating greater diversity and inclusivity in PAB accredited planning schools and in the community of practicing planners.

These courses arguably do more than demonstrate a program’s commitment to addressing socio-demographic inclusivity. They also prepare future practitioner planners to better address the values and needs of increasingly diverse communities and they become a springboard for advanced dialog around issues of ethnic/racial and cultural diversity. Furthermore, they may broaden the appeal of planning programs to a more ethnically/racially diverse student body, some of whom may even become future faculty of color, bringing full circle a virtuous cycle of inclusivity.

References

FROM CASE STUDIES TO AUTHENTIC PROBLEMS: STRATEGIES FOR ACTIVATING THE PLANNING CLASSROOM
Abstract System ID#: 1223
Pre-organized Session: Bringing Practice to the Classroom

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This paper asks the question, “How can planning education benefit from the use of active learning pedagogies?” There is a growing movement within higher education to step away from the unidirectional, passive learning format of lecture-based classes to teaching pedagogies that encourage active learning in what has been labeled “flipped classrooms.” Team Based Learning (TBL) is an example of one such approach where students work in heterogeneous teams for the duration of the semester and spend most of their class time working on team-based exercises where they apply the ideas they learn from readings and other preparatory materials. Case studies, stories from practice, and authentic problems all provide valuable materials for in class activities where students apply the course content.

This paper shares stories from the classroom. It introduces the TBL approach and provides examples of how case studies and stories from practice play an integral role in the application of this pedagogy. It reports the results from a study at Iowa State University that investigated the connection between TBL pedagogical practices and 1) beliefs about learning; 2) motivation to learn; and 3) professional development. The paper concludes with a discussion about the implications for planning classrooms and planning education.

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Most of my students have never left the United States. Many are visual learners. All of them are preparing to work in professional positions in an increasingly integrated global environment. My aspiration as the instructor is to achieve two objectives: 1) to make cities in developing nations “real” places to them, places they can visualize as well as they visualize streets in Cincinnati or elsewhere in the U.S., and 2) to teach them about the dynamics and reality of urbanization in developing countries so that they possess an analytical appreciation as well.

The practicality of this course, given the students’ general lack of exposure to cities in developing countries, is evident. Even more television exposure to foreign settings today than was the case the past, students are generally passive viewers. Thus, the course increases exposure and familiarity as well as a critical appreciation of the presentation and the issues.

The syllabus begins with the transition from colonialism to independence and the growth of cities in Asia, Africa, and Latin America. Other topics include low-income settlements, women’s issues, work, environmental issues, and other common issues, including planning and policy. Throughout, students simultaneously read a textbook and view documentaries in the same week. Student assignments include: 1) a research paper on a country of their interest, 2) a second paper on an urban issue in that country, and 3) a “video plan” (or “story board”) using this background to produce a 30-40 minute outline of a video they would like to create. There is also a mid-term and final examination.

The greatest challenge, having the word “Film” as the first word in the course title, is addressing the implicit expectation of, “Oh boy! Movies!” (No real work!!). Despite this expectation, the primary skill developed in this course is critical thinking. Primarily, this involves students using the textbook reading assignment to anticipate what the documentary film is likely to (and ought to) present and, then, post viewing, to critique the documentary and to assess the neutrality or bias of the film, along with discussing other issues. The focus on classroom discussion and viewing elements reflect the movement down the “Learning Pyramid” (thepeakperformancecenter.com) from passive to active learning; the approach also addresses the fact that about two thirds of adults are visual learners.

Besides examining student course evaluations, comparison of mid-term and final grades over the years (including segments that focus on text material, film material, or a combination of the two in a compare-contrast fashion) to assess retention of material, analysis of the course will rely on paper topics students have selected, as well as a selection of video plans. Anecdotal accounts of graduates’ emails and recommendations for future documentaries will also be incorporated, as appropriate. The overall objective of the evaluation is to ascertain students’ degree of knowledge of developing nations, their ability to link written to visual material, and their ability to incorporate the different types of learning into their own creative endeavor. The challenge of evaluation will be that there is no “control study” to serve as a base of comparison. The nature of the assessment will, therefore, be that of a case study.

This paper’s conclusions will focus on the pedagogical challenges of 1) introducing unfamiliar places to students as a complement to abstract learning, 2) improving reading, critical thinking, and visual literacy, and 3) developing traditional and creative writing skills. The preliminary lesson is that this combination of materials and approaches can be employed by other faculty members, whether to develop courses that center on or simply incorporate documentary film for similar purposes, if not similar topics.
References


Abstract Index #: 535

IMPASES AND FAILURES IN PROJECT DEVELOPMENT: WHAT DO UNIVERSITY AND COMMUNITY PARTICIPANTS LEARN ABOUT PLANNING?

Abstract System ID#: 1310
Individual Paper

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Many planning schools engage in community-university partnerships as a means to improve student training, give back to the wider community, and produce high-quality research. Often the presumption is that if one adopts a good approach to community-university engagement then all three objectives can be realized (Reardon 2000; Winkler 2013). Indeed, community-university partnerships ideally contribute to social change as well as teaching and research. What do we learn from partnerships when they do not result in social change? Is there anything gained from involvement in what ends up as a large-scale planning disaster?

Over the last ten years, members of a community-research alliance have worked to tame two mega-project developments in Montreal, Quebec. Typical of many large-scale projects (Flyvbjerg 2014), the two megaprojects have not conformed to participants’ hopes or efforts. A super-hospital is plagued with design flaws, cost-overruns, poor links to public transit, and reduced health delivery capacity; popular associations are with corruption and mismanagement. A highway interchange – to be built over the next decade – is simply not to the liking of city residents or city government; provincial transit authorities prioritized capacity for trucking and automobiles over environmental, quality-of-life, or urban design concerns. In both cases, local residents, students, and academic researchers had been involved in efforts – collaborative, analytic, discursive, and/or combative – to make these projects work for their surrounding communities. In the views of most alliance participants, their efforts have not met with success. Instead, the two megaprojects are prime examples of contemporary ‘great planning disasters’.

This paper draws on the research alliance’s experiences to explore what was gained from engagement with a seemingly unsuccessful effort to redirect these two megaprojects towards community priorities. The paper briefly reviews (a) existing perspectives on the aims of community-university partnerships, action research, and service learning, and (b) the development and outcomes of the two Montreal megaprojects. Discussion then turns to positive elements of partnership around ‘unsuccessful megaprojects’. The conclusion addresses the challenges of working with megaproject development, and theoretical and practical lessons for community-engaged planning education. Research is based on: the author’s direct involvement in the alliance (public, stakeholder, and research meetings and events); input from members of the alliance in annual reflections, evaluation surveys, group discussions, and individual narratives; review of public records (on public consultations and hearings, council meetings, and a corruption commission); and numerous research reports, briefing papers and other materials produced by the alliance.
Findings are of relevance to planners, researchers and students interested in community development as well as educators exploring community-engaged teaching. Four areas of ‘learning’ are identified. Engagement with ‘failed projects’ revealed contextual and structural factors – the ‘powers at play in urban development’, in the words of a community researcher – that can help community actors demand appropriate reform (e.g., in planning regulations, tendering processes, and local decision-making) and better prepare for future urban projects. As a result of drawn-out efforts to influence plans, connections and trust developed among residents, officials, students, professors, and professionals, often across neighborhood, linguistic, income and occupational divides. Students became attuned to community dynamics, and had the opportunity to learn both technical and soft skills, including those of listening, dealing with conflict, and assessing the power dynamics of a situation. Finally, there were ‘wins’ in terms of engagement: new concerns were ‘introduced into design debates around projects; as a result, there may be longer-term shifts in the community benefits expected from megaproject developments.

References

Abstract Index #: 536
NOT YOUR MOTHER’S DOCTORAL PROGRAM ANYMORE: REINVENTING THE PHD
Abstract System ID#: 1329
Roundtable or Informal Discussion Session

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Universities around the country are reevaluating the costs and benefits of doctoral education, and programs in planning which are usually small and not profitable as other fields are under scrutiny. Some of the threats include being collapsed into other programs, being asked to position as more interdisciplinary with new and fresher niches, and new expectations as to how doctoral students will be trained and educated. Planning educators involved in doctoral programs would benefit from a forum to discuss (1) the current directions of doctoral education in our field to prepare students for the future issues and future academic situations and (2) how programs have been reinventing themselves to meet the demands of university administrators as well as to address the future needs of the planning profession.

Track 10: Planning History

Abstract Index #: 537
WHO LIVES DOWNTOWN? PLANNING POLICY AND NEIGHBORHOOD CHANGE
Abstract System ID#: 25
Individual Paper

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In this paper we consider some of the ways that planning may have influenced who lives downtown in a smaller city. Halifax, Nova Scotia, Canada adopted its first master plan in 1945. Like many other North American cities, Halifax launched urban renewal programs in the 1950s and 1960s, displacing disadvantaged residents and transforming the urban fabric (Grant and Paterson 2012). From the 1970s on, planning policy increasingly promoted urban intensification and mixed use. The 1990s saw new urbanism and smart growth become influential, and the 2000s added creative cities objectives (Florida 2008, Grant 2007).

We take a social and demographic history approach. In addition to reviewing planning policy and interventions through the years we track census data from 1951 to 2011 to look at how downtown neighborhoods changed over time. The average downtown resident in 1951 was female, working class, poorly educated, earning low wages, living in a large household, and renting an apartment. By 2011, however, conditions downtown had changed significantly: males outnumbered females, incomes in several of the neighborhoods were much higher than the city average, many people had university degrees, and home ownership rates increased. Although some signs of gentrification were evident by 2011, we found that some trends differed by neighborhood. We conclude that although planning policy and public interventions enabled some changes to occur, several factors influenced the direction and degree of neighborhood change. These included broader social and economic conditions, interventions by major institutions (such as universities and hospitals), and local perceptions of the relative attractiveness of major features in the city.

A great deal has been written about neighborhood change in larger cities (Chen et al 2012), but less has been written about transitions in smaller cities (Prouse et al 2014). The paper will show that despite the efforts of planners to implement policies and plans to improve living conditions downtown, signs of continuing socio-economic polarization linger in Halifax. Instead of increasing urban densities and generating social mix, policies to support urban intensification may have the opposite effect, as small households of urban professionals move downtown and new clusters of people with particular social attributes develop. Practitioners can benefit from better understanding the processes of neighborhood change and the factors that limit their ability to coordinate development in ways that produce desired outcomes.

References
planning as a precedent that ought to be emulated. The “import” thesis was consecrated in Thomas Logan’s classic article on “the Americanization of German Zoning” (Logan 1976). However, several historians of North-American planning (for instance, Fischler on Montréal, Toronto and New York City, and Kolnik on Los Angeles) have documented the adoption of land-use regulations before the advent of comprehensive zoning (Fischler 2007, 2014; Kolnik 2008). They have shown that the largest North-American cities had zoning codes on their books, albeit partial ones in most cases, before New York City adopted the first comprehensive code in 1916. (The municipality of Westmount, a suburb of Montréal, had a comprehensive zoning code seven years before New York City did.) Despite the frequency and intensity of transatlantic exchanges, land-use regulation in North America was largely home-grown; from the middle of the 19th century on, it grew more substantively and geographically comprehensive.

In this paper, I build on my earlier work on the history zoning in North America, on the work of colleagues (especially that of Sonia Hirt [2014]) and on new research on primary sources from the 1900s and 1910s. When we broaden the focus from New York City to a larger set of North American cities, the evidence shows that the reference to Germany, which was especially important in the campaign to adopt zoning in New York City, was not necessary from a functional perspective; i.e., German zoning was not a basis for American and Canadian zoning. Rather, the German example was useful from a political perspective; i.e., the reference was used to try and convince the North-American public and its elected officials that a comprehensive approach, already advocated by Olmsted, Burnham and others, was needed and that the constraints of law and jurisprudence ought to be lifted to make it possible. In short, the reference to German planning was a rhetorical ploy, not a practical proposal. In reality, North-American zoning was the product of several decades of local experimentation and innovation, and references to German efficiency served to legitimate public intervention in capitalist urban development.

References
policy formation (Sorensen 2006). This paper, through a case study of Yubari City, examines the underlying reasons for Japan’s weak civil society.

Based on historian Sheldon Garon’s definition, “civil society” in this paper is defined to include groups that exist in spaces between the state and the people, and offer, at least occasionally, alternatives to official discourses and values (Garon 2003). With regard to the pattern of civil society found in Japan today, political scientist Robert Pekkanen points out that state structuring of incentives accounts for its development (Pekkanen 2003). Specifically, the Japanese state has structured incentives to promote small, local groups that can contribute to stocks of social capital but that have little impact on policy making, while at the same time hinder large, independent, professionalized groups which could change the political landscape (Pekkanen 2003). The purpose of this paper is to test Pekkanen’s theory through a case study of Yubari City. To that end, I focus on the following four interrelated questions: (1) What have been the central agencies’ policies on the coal mining industry in Japan, as well as on the development of Yubari City? (2) How have big businesses affected Yubari City’s economy and city planning? (3) What have been the planning processes of Yubari City to develop the tourism projects? (4) What citizen groups have formed in Yubari City, and what are their major activities?

This paper employs a case study method, drawing on a long-term study of Yubari City. The analysis is based on the following: (1) a review of tourism development project documents, and the history of national energy policies and coal companies operated in Yubari, and (2) interviews with key persons involved in the tourism projects. The case study of Yubari City shows that, in addition to the hostility of Yubari’s municipal government toward the environmental citizen group based in Sapporo (the capital of Hokkaido) that made claims against Yubari’s environmental problems, the top-down, centralized control of the national bureaucracy over municipal governance greatly contributed to the formation of a weak civil society. In Japan in the 1960s and 70s, when the country’s major energy source transitioned from coal to oil and most coal companies closed, the national bureaucracy implemented policies that, on the one hand, relieved the coal companies of the financial responsibility of the social conditions they had created in Yubari (Allen 1994), and, on the other hand, provided Yubari with huge grants and subsidies for regeneration. Such policies intensified the habit of the municipal government as well as of the citizens of Yubari to leave the resolution of the city’s problems to central authorities (Maclachlan 2003). In fact, before the bankruptcy, both the municipal government and Yubari citizens firmly believed that the state would bail out Yubari no matter how much debt the city accumulated. The dependence on central agencies for problem resolution alleviated the citizens’ feeling of responsibility, as well as their incentive to participate in local management.

References
During the heyday of streetcar transportation in the United States, neighborhood development took on a new and distinct character. Expanded development opportunities related to streetcars network growth, combined with residents’ desires to be removed from noise, pollution, and dirt of industrial-era cities, encouraged growth of “streetcar suburbs” and other exclusive neighborhoods designed to offer refuge from urban ills. The ideology of contemporaneous neighborhood development manifests itself in the physical features of the design of these neighborhoods. One such feature that became popular in early 20th-century streetcar neighborhoods was neighborhood entryway marker. These markers typically, but not always, took the form of a set of stone or brick towers, placed at the entrance to a residential street from an arterial roadway. Frequently, they incorporated additional features, such as overhead archways or lamps. In this article, we explore the nature, form, and placement of these markers, and the role they play in neighborhood identity, using a rich collection of surviving examples in and around Buffalo, NY.

Using a combination of historical literature, field data, and spatial analysis, we investigate the history, context, and purpose of these structures. In so doing, we explore several research questions:

- How does the defining features and characteristics of these structures relate to neighborhood typology?
- What was their effect in neighborhood life and development over time?
- What role do these structures play in development of new neighborhoods and/or revitalization of historic neighborhoods?

In addressing these questions, we find that, in concert with other neighborhood components, these structures have a significant effect on the streets and neighborhoods whose boundaries they delineate. Specifically, they serve to isolate neighborhoods from undesirable urban characteristics, while lending a sense of place and neighborhood scale. They also promote connectivity by emphasizing pedestrian and vehicular interface with surrounding areas.

Preliminary findings suggest that these structures had significant effects on the neighborhoods in which they were constructed, and that these effects persist despite the multitude of changes that have taken place in American cities since their construction. This suggests that such constructions have continued relevance, and a high potential for use, in traditional or new forms, in modern and future urban neighborhood development.

References

Within the annals of modern city planning, city noise holds an odd place. City noise is by far the most widespread environmental pollutant, affecting all populations. Yet, awareness of the history of noise pollution and its control are essentially non-existent in the U.S. planner’s repertoire. Furthermore, it appears that noise abatement has all but disappeared from the national agenda. However, as this paper will show, controlling noise was once a leading theme in the history of land use planning.

For this paper, I define city noise as noise that occurs in public spaces. It can either be generated in those spaces, such as noise created from children playing outdoors or it can travel into the ears of people occupying those public spaces, such as noise coming in from construction or landscaping. It also includes transportation generated noise, including airplanes, vehicle din and horns.

The paper will discuss the history of creating land use regulations to control city noise throughout five different periods: 1) the progressive era (late 1800-1910s), when “anti-noise” reformers were focused on quieting the city to make it a better place for workers and a healthier place for citizens; 2) the functional city era (late 1910s-1930s), when, starting with the City Beautiful movement, noise abatement becomes a goal for most city master plans and zoning ordinances; 3) the era of suburbanization and modern transportation (1930s-1950s), when the rise of highway din and airport noise cause geographically widespread noise pollution; 4) the urban renewal era (1950s-1960s), when noise is used as a factor for designating an area a “slum” under the federal urban renewal program; and 5) the era of federal environmentalism and eventual devolution (1970-present), when noise pollution is briefly on the national agenda, but then is quickly, and ineffectively, pushed off to local governments.

This is primarily a historical research study, in which I rely on written materials including newspapers and magazines, government reports, and planning and public health documents. For this purpose of this paper, New York City is the main illustrative case; however, at times I use other U.S. cities as examples of U.S. noise control history. In order to explain the contemporary significance of noise pollution, I’ve conducted a literature review, explored current news stories and government reports, and analyzed data from the American Housing Survey and public health reports.

References

Abstract Index #: 542
AREA REDEVELOPMENT ACT REDUX: POST-INDUSTRIALISM AND KENNEDY'S VISION
Abstract System ID#: 559
Individual Paper
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Central Theme: The sustainable restructuring of depressed, post-industrial economies is a fifty-year ongoing challenge. As early as the mid-forties, many urban areas had already felt the impact of the changing economy. The passage of the Employment Act of 1946 was intended by Congress to promote maximum employment and production. However, little was done in the next decade to realize that goal. A breakthrough came with the enactment into law of the Area Redevelopment Act (ARA) in 1961 after two earlier Presidential vetoes. An early cornerstone of President John F. Kennedy’s New Frontier initiative, the Area Redevelopment Act signaled the direct investment and complementary policies needed to address structural unemployment. At the signing in February 1961, President Kennedy remarked, “A wise public policy uses economics to create hope—not to abet despair.” Shepherded by Democrats, ARA called for stronger government intervention to protect and create jobs in places with unemployment rates of six percent or more in traditional sectors such as manufacturing, mining, and textiles. Republicans argued that the private sector, not government, was the only solution. Democrats,
however, prevailed for a short time at least. A proposed extension and funding increase of the legislation was defeated in 1963; this is considered one of the most difficult legislative turns in the Kennedy agenda. The spatial and sectoral disintegration of “blue-collar” work that the ARA and Jane Jacobs specifically targeted (The Economy of Cities) has intensified in the intervening years and whole sectors of the economy have disappeared. This paper explores the impact of ARA, the political barriers that prevented its continuation and expansion, and the implications for current local, economic initiatives.

Approach and Methodology: With economic restructuring still current more than 50 years later, this paper revisits the debate on the most effective ways to stimulate depressed economies through the lens of scale, timeframe, and role of local partners using the experience of the ARA as a policy case study. Had the ARA been fully funded and administered with legislative intent, would that have changed the outcomes?

Research methods will include use of original sources from the Kennedy Presidential Library and Museum including transcripts of President Kennedy’s speeches and correspondence, interview transcripts of ARA Administrator William Batt, Senate Banking and Commerce transcripts, and available primary data from ARA recipient cities.

Relevance: Because this legislation was short-lived, its impact and influence on subsequent programs lacks the breadth of analysis applied to its successor, Economic Development Administration. Scholars and students of local economic theory and practice as well as economic development practitioners could benefit from an understanding of the historical context of ARA, but more importantly, how federal investments in locales with negative economic indicators could be more strategically placed, ways that barriers can be minimized, and the necessary social and political infrastructure needed to support federal investments.

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- Dr. Nancey Green Leigh
- Dr. Sonia Hirt
- Dr. Avis Vidal
- Dr. Margaret Dewar

Abstract Index #: 543
THE EFFECTS OF INVASIONS AND WARS ON URBAN FORM: A HISTORY OF SHENYANG CITY, CHINA
Abstract System ID#: 579
Individual Paper

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Shenyang, formerly the capital city of the Qing dynasty in China, has experienced a unique urban planning and construction process, primarily due to repeated internal and external wars throughout history. From 1898 to 2000, Shenyang experienced a multitude of invasions including attacks from Russian and Japanese countries and internal conflicts such as the Chinese Civil War, the Warlord Era and the New China Era. These invasions and wars have significantly influenced the transportation system, industrial structure and economic status of the city, resulting in direct and indirect changes in the urban form of Shenyang. The city with now has two urban core areas and is characterized by and a collage of styles including Chinese organic and grid forms, European Baroque axes and terminal points, and Japanese ‘ting’ and rhombus forms. The rhombus form appeared in the old Commercial Port area in Shenyang to connect the Imperial Palace and historical South Manchuria Railway Zone areas.

In an effort to untangle this rich spatial tapestry, this paper reviews invasions in Shenyang’s history and links their effects on factors of social equity such as urban construction, street networks change, accessibility and locational difference. These variables are analyzed using 10 historical maps from 1898-1996 through Space Syntax software,
which identifies fundamental links between spatial layout and the social, economic and environmental performance of a place. The study assesses differences through both time series analyses and single time period district comparisons.

In 1898-1903, during the Russian invasion period, the South Manchuria Railway was constructed. After the Japanese took over in 1905, they planned constructed the South Manchuria Railway Zone. This Zone is characterized by the traditional Japanese ‘ting’ form as well as European Baroque elements which, at that time, were popular in Japan. In 1906, under the requirements of several western consortiums, the Chinese government, in partnership with Japanese colonists, constructed the first horse-drawn rail car line. This strengthened the link between the Imperial Palace area and historical South Manchuria Railway Zone. Between 1916 and 1931, the Warlord Zhang Zuolin controlled the urban development of Shenyang. Within this time, the Commercial Port area in Shenyang was established. This is historical zone urban Shenyang allowed foreigners to build houses, rent land and conduct business.

The area between the Imperial Palace and the historical South Manchuria Railway Zone eased the contact between political and military populations. Planning in this area did not simply mimic the form of the South Manchuria Railway Zone, but explored a way to best connect the Shenyang old city with the Railway Zone while maximizing the integrity of the land. Also, the South Market design in the commercial port area followed the traditional Chinese Eight Trigrams ideology, which came from the famous philosophical book ‘I Ching.’ Around 1920, Zhang developed several industrial districts in Shenyang. The forms of these industrial districts all differ. Some follow European styles and many were self-developed without a clear pattern. All the forms discussed above still can be seen in Shenyang today, despite large locational and accessibility differences. Internal and external strife led to a dueling urban system with split populations, resulting in separate central business districts between cultures. Historical events. Such as wars and strife, can significantly influence urban form and due to social equity lapses. Policies to balance these issues and smarter design/planning can assist.

References

Abstract Index #: 544
FREEDOM ROADS: THE ROLE OF THE ROAD IN THE FIGHT FOR SOCIAL JUSTICE
Abstract System ID#: 656
Individual Paper
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“The constitution guarantees that a citizen or group of citizens may assemble and petition their government for redress of their grievances even by mass demonstration . . . and such rights may also be exercised by marching, even along public highways . . .”
-‘Williams vs. Wallace’, class action suit against Governor George Wallace and the State of Alabama for the right to march from Selma to Montgomery, March 17, 1965

Though the first, fourteenth, and fifteenth amendments to the US Constitution establishing free speech and redress of grievances, citizenship, and the right to vote respectively had been ratified nearly a century before, the
1960’s in the American south were a time still of institutionalized inequalities. While over 50% of the voting-eligible citizens of Dallas County, Alabama were black in 1961, less than 2.2% of those 15,115 people were registered to vote compared to 66.8% of their white counterparts. In Wilcox County, where blacks outnumbered whites 3 to 1, not one single black citizen was registered whereas 100% of the county’s 2,647 whites had filed successful voter registration applications. Public toilets, hotels, and restaurants were still segregated under Jim Crow laws, which legalized the so-called ‘separate but equal’ strategy by devising a discriminatory system of barriers, prioritization, and intimidation. In Montgomery, Alabama of the late 1950’s a black woman was required by law to surrender her seat on a public bus for a white passenger of either sex. The civil rights activists of this era foresaw the enormity of the task that lay before them, combating generations of unchecked power and a sense of entitlement and ego born from decades of oppression. Strategically, the campaign attacked the larger issue through the smaller, humanist questions of individual rights and responsibilities – the right to eat lunch in a public facility, to wait for a bus in comfort, and – the most basic to democracy – the right to vote. The question of ‘public’ was vital in this debate – who is included in the definition of the American public? Who in fact qualifies under the guise of law as a legitimate citizen? And, in light of that inclusion, where and how is that public made present? On December 5, 1955 when Rosa Parks, an unknown black seamstress, refused to give up her seat for a white man who had boarded a Montgomery public bus after her, she and the entire movement enlisted the entanglement of constitutional law and transportation infrastructure as an ally in the redefinition of human value. Three linked events brought the role of the road into the twentieth century debate for civil rights: the Montgomery bus boycott of 1955 and 1956; the Freedom Riders and their interpretation of the Interstate Commerce Clause; and the attempted and then actual 54 mile march from Selma to Montgomery on US-80. This paper looks at the latter of those events, particularly focused on the legal and theoretical transformation of US-80 over the three attempted marches into federal-level contested civic space, and the way those contestations may be utilized to more equitably consider infrastructure’s role as an active part of the public realm.

References


EXPRESS ROUTE TO ECONOMIC DEGENERATION: URBAN RENEWAL ON BUFFALO’S EAST SIDE

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Individual Paper

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In Buffalo and throughout the United States, the 1960s ushered in two paradoxical experiences for urban residents, particularly African Americans: the expansion of civil rights and the progressive physical constriction of their neighborhoods through urban renewal activities. A short drive down Buffalo’s once-bustling Broadway bespeaks of a historic commercial corridor pock-marked by vacancies and neglect. The physical signs of disinvestment cascade: boarded up doors, tattered curtains fluttering in broken windows, empty lots, litter. Abstract indicators---crime statistics, economic investment figures, graduation rates---all speak to a neighborhood, Buffalo’s largest, that has been routinely neglected by both public and private entities. As other portions of the city enjoy an economic revival, the East Side remains locked out of such improvements.

Rewind the clock six decades. Women in dresses and gloves, men in suits and hats walk down the street, packages in tow. Doors open and close at bakeries, shoe stores, meat markets and tailors. Children wait (impatiently) outside; impromptu games commence. Lines of cars converge at intersections, and church marques announce weekly services. This was the East Side of Buffalo in the 1950s, ironically bemoaned by planners for being too congested. Can we pinpoint the moment the vibrancy of the neighborhood began to dim? I argue that the demolition of the Humboldt Parkway (1958), designed by Frederick Law Olmsted and one of the city’s most picturesque greenways, for the six-lane Kensington Expressway (1961-1965) was a catastrophic planning decision, effectively barricading the East Side’s increasingly African American population from the rest of the city.
The history and impact of the devastation wrought by urban renewal in American cities is well-trod academic ground, but Buffalo has been largely under-explored from this angle. Historians such as Thomas Sugrue (2014), Robert Fogelson (2003), and Douglas Rae (2001) have all studied the role of industrial relocation, suburban developments, and racial tensions in effecting settlement patterns and the establishment of the current inner-city crisis. Scholars of the built and natural environments, such as Michael Tomlan (2014) and Robert Gioielli (2014), have focused on the impact of physical surroundings on communities and how their degradation fueled activism beginning in the mid-20th century. Despite much excellent work on these themes, such perspectives have not adequately addressed how Buffalo was impacted by urban renewal activities, or how city planners responded to further neighborhood decline through subsequent 1970s planning initiatives. The challenges of Buffalo’s East Side are reflected in cities throughout the United States, and without an understanding of the urban planning historical record, we are left with an incomplete analysis that precludes developing new revitalization schemes based on well-grounded assessments.

To address this substantive gap in the literature, my paper addresses the issue of urban renewal decisions on Buffalo’s East Side with special attention to follow-up mitigation and revitalization efforts by planning officials in subsequent decades. I will examine a variety of materials, including adopted municipal planning documents, transportation plans, neighborhood outreach efforts, U.S. Census records, maps, photographs, and oral histories. As part of a larger dissertation project on the East Side, I will explore the physical, economic and social impacts of the demolition of the Humboldt Parkway, the construction of the Kensington Expressway, the reorientation of neighborhood resources, and successive public and private initiatives to readress the adverse effects of transportation reconfigurations. I will use these findings in juxtaposition with contemporary revitalization ideas regarding the removal of the Kensington Expressway and the reintroduction of a modern version of the Humboldt Parkway in order to evaluate the feasibility of the reintegration of the East Side into Buffalo’s urban fabric.

References

Abstract Index #: 546
BRINGING HISTORIC PRESERVATION INTO PLANNING HISTORY: NARRATIVES OF URBAN CHANGE AND THE INDUSTRIAL LANDSCAPE OF HOLYOKE, MASSACHUSETTS IN THE 1970S
Abstract System ID#: 767
Individual Paper

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In 2006, writing in the Journal of Planning History, urbanist and historian Joseph Heathcott argued that “it is vitally important that historians of city planning, architecture, and design begin to incorporate historic preservation into broader narratives of urban change.” This paper responds to Heathcott’s challenge, examining the recent history of the planned industrial city of Holyoke, Massachusetts. It will contribute to planning history scholarship by bringing attention to debates about the meaning, uses, and interpretation of the Paper City’s historic urban form in relation to planning, specifically in the areas of economic development, land use, and zoning. The analysis focuses on the 1970s as a critical period of urban change and political debate, examining how local actors constructed narratives about the urban landscape and imagined the city’s future. A central theme in the analysis is how historic preservation emerged as an alternative approach to modern methods of physical planning and development, following the adoption of the National Historic Preservation Act of 1966 and the establishment of the Holyoke Historical Commission in 1972.
Historic surveys and planning studies, designations to the National Register of Historic Places, and local history and heritage events connected to the city centennial (1973) and national bicentennial (1976) contributed to a high degree of historical awareness during this period. Districts listed on the National Register include the Hadley Falls Company Housing District (1972), Wistariahurst (1973), and the Holyoke Canal System (1980). Furthermore, between 1978 and 1983, the state legislature provided authorization and funding for Holyoke as one of eight Heritage State Parks in the Commonwealth, leading to the construction of a visitor center and museum in the downtown area adjacent to the city’s canal district.

This study will build upon the integrated approach to planning and preservation history established by Michael Holleran in his 1998 book Boston’s “Changeful Times”: Origins of Preservation and Planning in America. Using a case study method, this paper examines modern preservation and planning in the context of urban renewal and deindustrialization. It also confronts the tricky interrelationships as well as revitalization potential of intergovernmental funding, relations, and control, looking at how planning processes involved local, state, and federal actors.

Methods and sources include a review of planning reports, government documents, historic preservation survey and documentation forms, and maps; analysis of newspaper articles, particularly the reporting of debates over job creation strategies, industrial retention, and urban renewal; and, interviews with current planners, preservationists, and citizens.

References


Abstract Index #: 547
FROM THE COLD WAR TO THE WARMED GLOBE: NUCLEAR CIVIL DEFENSE, CLIMATE CHANGE ADAPTATION, AND THE OPPORTUNISM OF PLANNING
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Individual Paper

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In the last 70 years, two fundamental problems have threatened the very survival of the planet: nuclear war and climate change. In each case, planners have sought to use the urgency of these problems as a lever to propose sweeping reforms, often using a new rationale to re-package earlier ideas. This paper analyzes how mid-twentieth century planning discourses on nuclear civil defense might relate to and inform our understanding of contemporary conversations relating to urban climate change adaptation. For their respective generations of planners and urbanists, each of these threats have been regarded as necessitating fundamental shifts in the spatial, political, and economic structure of cities. This exploratory paper assesses how planners, designers, and allied disciplines have characterized the threats associated with these two phenomena. We consider the remedies proposed (spatial as well as political, economic, and social) to cope with these emerging threats and assess how they relate to pre-existing trends in planning and design. Lastly, we explore how analysis of the previous cycle of nuclear threat-driven urbanism—examining how proposals for decentralization were both
enacted and rejected — might help us understand the emerging directions in urban climate change discourse. Drawing on close reading of theoretical writings and planning proposals from leading mid-century urbanists such as Ludwig Hilbersimer and Lewis Mumford, as well as on proposals debated in the Bulletin of the Atomic Scientists during the 1950s, we attempt to sort out the extent to which planning proposals opportunistically used the Cold War nuclear threat to advance earlier ideas that had failed to gain acceptance.

Written just one month after the first atomic bombs were dropped on Hiroshima and Nagasaki, Ludwig Hilberseimer’s introduction to The New Regional Pattern, predicted that “The atomic age which we are now entering with its changing forces, will, however inevitably change the problems of planning” (Hilberseimer 1949). Hilberseimer and many other urbanists viewed the advent of the nuclear age as cause for fundamentally reshaping the form and structure of cities. The bomb served as a muse and a motivator for urban thinkers across the spectrum from the high-Modernist Hilberseimer to the garden city regionalism advocated by Mumford. Although their previous decades-long pre-War appeals for planning reform on aesthetic, moral, and efficiency grounds had not been effective in overcoming entrenched political and economic interests, these thinkers saw the existential threat of nuclear destruction as something of a planning trump card. They hoped that with this new dreadful potential on the horizon, the balance of competing urban interests would finally be shifted in their favor.

Echoing the sentiments of their nuclear-age forebears, advocates of urban climate change adaptation proclaim, “this changes everything” (Klein 2014). Planners, designers, and allied scholars have put forth a range of proposals in response to these mounting risks, ranging from building and neighborhood-scale efforts to promote “resilience” to broader calls for the “transformation” of spatially-embedded social, political, and economic patterns to address the “root causes” of urban vulnerability (Pelling 2010). However, based on the analysis of nuclear-era planning, we ask: To what degree does climate change adaptation “change everything” for planners and to what degree does it provide a new rationale and a new rhetoric for pre-existing projects? If the planning responses to the threat of nuclear war were largely rooted in pre-Manhattan Project visions for urban reform, how do the responses to this new complex of urban climate change risks relate to previously existing projects in planning, from ecological design to anti-capitalist social inclusion to Global City mega-projects?

References

LUCKNOW: IN SEARCH OF AN URBAN IDENTITY
Abstract System ID#: 944
Individual Paper

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The evolution of urban landscapes in Indian cities is a unique and often iterative process, largely dependent on political and social conditions prevalent at the time. India’s particularly complex history, especially through the medieval period, also ensured that geography played a role in the development of urban landscapes. Consequently, northern, southern, eastern and western Indian cities have distinct identities and patterns resulting from very particular geo-political conditions. As a result there is very little conformity and overlap between urban landscapes in India—form and spatial configurations can vary from being wholly Hindu, Islamic, Dutch Colonial, British Colonial, Portuguese Colonial in influence, to being permutations of two or more. Each of these influences in turn have temporal implications in shaping urban landscapes in cities, giving rise to contemporary challenges and conflicts between urban development and the need to preserve urban landscapes.
This paper examines the development of one such Indian city, Lucknow, and illustrates how diverse trends and influences over time have resulted in a dense and rich urban landscape that is today struggling for an identity and a sense of heritage.

Lucknow has had a host of influences in the several centuries of its existence, with the most notable development occurring during the city’s Nawabi phase. The city’s urban landscape underwent a significant transformation after the advent of the British, first through the East India Company, and then through the Crown. Conscious acts of planning, however, only began at the turn of the twentieth century, a time when Ebenezer Howard’s ideas for ideal city form were already being implemented. The often-ignored city of Lucknow, in northern India, benefited from Howard’s influence on planners like Patrick Geddes and James Linton Bogle, who, each in their own way attempted to turn Lucknow into a city of gardens. In the 1940’s, American architect Albert Mayer, in his role as the Planning & Development Adviser to the Government of Uttar Pradesh of a newly-independent India, was instrumental in shaping how the city was planned. The aftermath of Independence also brought one of the largest displacement of people in modern history, when India was partitioned to create Pakistan. Hundreds of thousands of refugees flooded into the city, further shaping planning strategies, initiatives and policies for the next few years. In the new millennium, the city has once again transformed into the ‘city of gardens’ that it was thought to be a century ago. Large-scale construction of parks and gardens in the peripheral areas of the core city, primarily motivated by politics, have propelled the city into a new era of its development and identity.

In order to highlight the city’s transformation into an eclectic mix of spatial patterns both old and new, I will trace over three centuries of the city’s development: from its earliest origins to the influence of the Nawabs, from the early twentieth century improvement schemes, to a sudden need for residential communities post-Independence, to its present-day role as a city of gardens and parks. These multi-layered patterns have been overlaid on a historic urban fabric that makes the city unique, and hence ideal for a host of initiatives to preserve the historic urban landscape. The rich tapestry of influences, however, also cause conflict in whose heritage needs to be preserved, and who has the right to that heritage. Pre-twentieth century layers comprise the original indigenous settlement, overlaid with Islamic-era landscapes, overlaid with British efforts of demolition, reconstruction and control. It was only at the turn of the twentieth century that the city of Lucknow began to be ‘planned’. But was Lucknow ever really wholly planned and what does that mean for its urban heritage?

References
their owners and denizens to criminal punishment. Through most of the 19th century, however, the “disorderly” label only applied if a land use actually disturbed its neighbors. For example, courts regularly rejected disorderly house cases brought against rural brothels and saloons located far from population centers, as well as discreet "houses of ill fame" that conducted their business in a way that did not attract their neighbors’ attention.

When Chinese immigrants began to open opium dens in Western mining towns in the 1870s and early 1880s, local, state, and territorial governments initially tried to regulate them by amending their longstanding disorderly house laws. These opium den laws represented the first drug laws in American history: The sale and use of opium, cocaine, and other drugs remained entirely legal, but growing public concerns about opium smoking led dozens of city councils and state and territorial legislatures to make it a crime to operate or visit a house where opium was sold and used on the premises. These new laws reflected an uneasy compromise between anti-vice activists and the anti-Chinese movement, on the one hand, and those concerned about government overreach into the private sphere, on the other. (Courts and legislatures often explicitly exempted opium use in one’s own private home from the reach of these laws, recognizing the precedent such a ban would have for the regulation of alcohol.)

Although legislators throughout the mining West tried to define them as just another species of nuisance property, opium dens were not neighborhood nuisances in any familiar sense. While drunkards often became rowdy and enraged, most opium users became introspective and lethargic. Informed accounts uniformly describe opium dens as quiet and civilized places, where a strict code of conduct ensured that fights were rare and quiet almost always reigned. Once opium dens had proven that they were not incorrigible nuisances to the surrounding neighborhood, they would presumably disqualify themselves for treatment as disorderly houses in the traditional sense of the term.

Even for its traditional targets, however, disorderly house doctrine had already begun to degenerate by the third quarter of the 19th century, in the sense that a house might be found “disorderly” even though the activities that took place inside it affected no one on the outside at all. Where the common law idea of “nuisance” that underpinned disorderly house doctrine had once been limited to the tangible intrusion of sight, sound, and smell onto neighboring properties, by the 1870s it encompassed purely moral nuisances. This new concept of nuisance, I argue, reflected anxiety about the corrupting potential of the cosmopolitan urban environment, and particularly its racial diversity.

By shedding light on the transformation of central concepts in nuisance doctrine on the eve of the revolution in American land use law that took place in the early 20th century, I hope to call attention to the contingency of the ideas that actually informed that revolution. In that way I hope to help lay the foundations for a deeper understanding of the historical roots of American land use control, as well as other aspects of legal control of the urban environment.

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Abstract Index #: 550
PLANNING HISTORY, INSTITUTIONS, AND THE COMPARATIVE PROJECT
Abstract System ID#: 1018
Individual Paper

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This paper develops a theoretical framework for an institutional approach to comparative planning history research. I start with the limiting assumption that a primary challenge of planning in capitalist systems is to develop effective strategies for managing land and property development, and equitably distribute the costs and benefits of delivering infrastructure and services within bounded territories. I draw on the 'Varieties of Capitalism' (VOC) thesis, which finds both significant diversity and continuity of different national capitalsisms in the face of global economic integration (Hollingsworth and Boyer 1997, Hall and Soskice 2001, Streeck and Yamamura 2001, Yamamura and Streeck 2003). VOC encompasses a broad research agenda that examines and seeks to explain differences in the institutional configurations of capitalist systems in different countries. I suggest that such a comparative institutional approach will be valuable in planning history studies.

Following the work of North (1990) on the role of institutions and economic performance, a key claim of VOC analysis is that the institutional infrastructure of national economic and governance systems can provide important comparative advantages for firms, that influence overall economic performance, and that sets of such institutional infrastructure are self-reinforcing and hard to change, because changes in one institution will be difficult or ineffectual without reform of other linked institutions (Evans 1995, Streeck 1997). This framework is applied to urban planning and governance institutions relevant to land and property development. It is argued that functional interdependence among multiple institutions is a powerful factor that reinforces path dependence, so the different varieties of capitalism will be unlikely to converge on a common model (Hall and Soskice 2001). Analysis of path dependent urban institutions suggests that such convergence may be very slow or nonexistent. I have argued than an institutional approach to planning history promises important insights for comparative analysis of planning institutions (Sorensen 2015). This paper develops this approach with a theoretical and comparative approach to the analysis of institutional development and change within planning governance.

References

Abstract Index #: 551
RECONCEPTUALIZING COMMEMORATION: DISSOLVING CULTURAL BOUNDARIES IN A POST-MODERN WORLD
Abstract System ID#: 1112
Individual Paper

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After World War II, planners and civic leaders called for “living memorials” such as the dedication of an auditorium, public plaza or highway rather than the traditional war memorial (Shanken 2002). Their argument was that living memorials were a better use of the public’s money, creating what we would call today, a liveable city. They also believed that such memorials better reflected contemporary attitudes towards memorialization, which placed the dead firmly outside the routine life of the city.

Their attitudes toward war memorials reflected a broader cultural separation of the living from the dead. Twentieth century Americans witnessed the placement of the dying in hospitals, the deceased in the funeral home, and memories in the private home and the cemetery (Sloane 1991). Death, which had played previously a
central role in Americans’ lives, was re-conceptualized as a social taboo, with trips to the cemetery avoided and
the sick and dying discussed in awkward terms (Mitford 1963). Much as Euclidian zoning separated and
segregated uses, the cultural avoidance of death ensured the dead would be sheltered in increasingly
disconnected spaces.

This paper examines how, since the 1970s, these sharp boundaries have begun to dissolve. The most visible
symbol of this dissolution is the success of large public memorials such as Maya Lin’s controversial Vietnam
Veterans Memorial, but the change is a broader shift in our attitudes toward the dying and the dead, resulting in
the re-emergence of home death (much like the home birth) and the reconsideration of the cemetery as the sole
place for memories. Americans, especially younger residents, are demanding immediate, personal, non-mediated
public memorials for those killed, for example, in car/bicycle accidents and wars. The most recognized of these
new memorials is the roadside shrine, but they also include lesser variations such as the ghost bike, car/truck
vinyl decal, and memorial (tattoo) ink. Commemoration has been personalized, and the personal has become
more public.

The paper will consider the design and content of these new spaces using archival sources, analysis of newspaper
and other public media, and individual observations. It will discuss how they are both innovative (using new
technologies in altered spaces) and nostalgic (retaining old tropes and reusing familiar icons) in their content and
architecture.

This cultural shift has potentially profound implications for planning. The public nature of the memorials, and
their location in both liminal and illegal spaces, raises issues of how we regulate memory in society. Their
presence in public spaces intrudes on conventional, modern conceptions of what is appropriate there. Roadside
shrines and ghost bikes especially confound transportation planners, who often dismiss them as mobility
distractions -- even as younger generations view them as enriching urban landscapes and educating passers-by.

Coutts et al (2011) and other planning academics have renewed the study of the cemetery as a land use. This
study explores the topic from a related but different perspective, moving from an analysis of land scarcity to one
of cultural change. The research hopefully will contribute to emerging literatures on informal uses of space in the
city, changing conceptions of land use regulation, and evolving understandings of the use of public space in the
city.

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Abstract Index #: 552
HOW CITIES BECOME “PROGRESSIVE”? A TRI-CITY CASE STUDY
Abstract System ID#: 1145
Individual Paper
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There has been a renewed interest on the idea and genesis of the “progressive city” (Goldberg, 2014; Clavel,
2013; Schragger 2009, 2013) since the first seminal work on this issue by Clavel (1986). In his first seminal work
on the “progressive city,” Clavel (1986) explored five smaller American Cities i.e. Hartford, Cleveland, Santa
Monica, Berkeley, and Burlington to understand how redistributive and participatory reforms push the cities towards “progressive” direction. This current research explores three American cities i.e. Portland, OR; Austin, TX; and Madison, WI and their history from 1900 to present time to further understand the genesis of the “progressive city.” I divide the time in three distinct phases for the sake of brevity. The first phase deals the history of each of city from 1900 to the Second World War. The second phase constitutes the post Second World War period that ends in 1980 and finally, the last phase explores with the contemporary history from 1980 to current time.

This research conceptualize “progressive city” as one that is defined in two ways: (a) by processes of inclusive and participatory governance; and (b) by the outcomes it achieves in terms of social justice. On both counts the “progressive city” is understood to be a public city with a broad public sphere with an active civil society and its representative organizations, along with government and the private sector. I use this conceptual framework to explore one main research question: how cities become “progressive.” In another words, the overarching inquiry of this research is to investigate the anatomy and drivers of the “progressive city” by using a tri-city case study. I use archival and historical document analysis method to conduct this research. I analyze among other documents- the municipal legislation, city general plans, and newspaper articles to investigate the genesis and drivers of the “progressive city.” I also conducted semi-structured interviews with the city mayors, council members, planners, residents, activist groups, civil societies and grass root organizations to understand the recent development and history of the cities.

Preliminary findings of this research show promising results in all three cities in demonstrating the legacy of the history of planning and policy making in municipal level. As for example, Portland has very unique Urban Growth Boundary (UGB) that was passed in 1973 to manage the growth of the city. However, at its core UGB has clearly demonstrated how collective rights and imaginers can be achieved over individual property rights. In Austin, the city controls and runs the Public Utility Company i.e. Austin Energy. During the last several years more than $100 million profit was transferred from Austin Energy to the city general fund to provide, “vital city services such as police, fire, EMS, parks and libraries.” At the same time, public ownership of the utility company has kept the energy price in check for the city residents and businesses compare to the surrounding suburbs. Finally, Madison a city of less than a quarter million people has more 120 neighborhood associations. These grass root neighborhood associations have been playing vital role in participatory planning processes. Even though the nature and content of these three examples vary widely, but all of them lie at the core for the “progressive city” formation. Each of the examples shows how different planning and policies are making these cities “progressive.” This research is very relevant because it shows how “progressive cities” take their form and shape over the course of time and how other cities can learn from these case studies.

References

Abstract Index #: 553
THE NEXT URBAN SUCCESS STORY: SEARCHING FOR EXPLANATORY TOOLS
Abstract System ID#: 1198
Individual Paper

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Buffalonians are sure that it is their turn to be the next urban success story, the latest overnight sensation declared by the burgeoning on-line urban media, the next cool city. More seasoned observers understand whatever forward progress is being made has been decades in the making. But the question remains: how do we explain the resurgence of cities and their regions? And how do we prepare methodologically as well as theoretically to ask and answer the question?

The dominant paradigm in the field is urban regime theory from Lefebvre to Logan and Molotch to Stone and beyond. Rooted as it is in marxian analytics it has a powerful logic but it leaves one wondering what to do about all of the other things that might be influencing urban fortunes. Earlier efforts privileged either structuralist accounts from the right (Peterson) and the left (Gottdiener) or stories that gave broader reign to political agents, especially through planning (Abbott, Clavel).

More recently, some have tried to broaden the structural context to include global processes of capital and politics (Lauria). Some, like Benjamin Barber, have given new emphasis to city regions as sites of regeneration if not resistance (also Katz; Mollenkopf et al; Imbroscio; even Florida). But what if we don't have to choose? Is there room for explanatory theory that recognizes a range of factors. DeLeon wrote about "multiple conjunctural causality" as if some might think it far fetched. Urban regimes have an impact. Global flows of capital have an impact. But so do insurgent practices from the grassroots as many have shown from E.P. Thompson's emergent working class to Castells Grassroots to Herscher's "Unreal Estate."

This paper will attempt to sort out these contending perspectives, searching for a range and balance of explanatory tools, and teasing out the methodological implications for historical research. The product will be a prospectus and a guide for a more ambitious work on Buffalo urban history that aspires to give more than the easy answers.

References

Abstract Index #: 554
BECOMING THE LENDER OF FIRST RESORT: FEDERAL FINANCING IN TWENTIETH-CENTURY RURAL AMERICA
Abstract System ID#: 1307
Individual Paper

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Financing is a key factor in planning and regional development, not just practically but also ideologically. Recently, urban scholars have encouraged us to “follow the credit” in order to understand how our world has come to be shaped and whose visions have created the financial instruments that enable processes of development (Christophers and Gilbert 2011).

In this spirit, this paper explores how financing came to be a preferred tool of the federal government in rural economic policy in the early twentieth century, and how federal loans became a major resource in developing the American countryside. Debt financing was not unknown to early twentieth century rural communities, but government loans were new. Prior to the twentieth century, small farmers and rural business owners had been at the whims of private banks and individual lenders (Levy 2012); but, by mid-century, federal programs had
become significant backers across rural America for everything from farm ownership to infrastructure improvements to the purchase of household appliances.

The paper thus seeks to examine a moment of economic shift in rural America from private financing aimed primarily at extracting wealth from rural communities to federal loan programs aimed at more fully incorporating rural communities into national markets as both producers and consumers.

It further explores contradictory responses to these federal loans. While many of these early twentieth century federal loan programs have been considered to be largely the result of Populist politics (Sanders 1999), farmers were in practice skeptical of such loans. They had seen private farm mortgages ruin their families and neighbors many times in the past: decades of predatory lending, coupled with the natural fluctuations of farm productivity and the economic fluctuations of an increasingly market-focused agriculture had brought waves of economic suffering to rural America. A popular poem from the era held that many farmers "died of mortgage" (Levy 2012). It's understandable that, by the mid-twentieth century, farmers would have been wary of government loans. Still reeling from agricultural price fluctuations of the 1920s, the Depression, and the environmental ravages of the Dust Bowl, they must have wondered how they would pay off these loans, or if federal loan programs were yet another set of predatory financing schemes destined to ruin whole communities. The paper questions how the definitions of economy and development used by the federal loan programs were not quite in sync with previous Populist visions of government responsibilities to rural America.

This paper draws extensively on archival research on federal rural electrification financing and home improvement loans through the Rural Electrification Administration and Electric Home and Farm Authority, as well as histories of the Federal Farm Loan Act of 1916 and subsequent federal rural loan programs through the 1930s (Adams 2003), in comparison with a growing literature on of the history of speculative finance in the rural U.S. at the end of the 19th century (see, for example: Levy 2012; Baptist 2010).

References

Abstract Index #: 555
STEWARDING THE RECENT PAST IN A FAST GROWING PRESENT: THE CASE OF ABU DHABI
Abstract System ID#: 1314
Individual Paper

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While the roles of heritage have expanded from mere symbols of national unity and pride to encompass much broader phenomena (Clark 2000), critics continue to debate over the potential use of heritage. Some consider use to be among the biggest threats to heritage (Herbert 1995), others call for integrated heritage management (Jokilehto 2004). However, these perspectives have not adequately addressed the issue of preserving cultural heritage of a recent past. Moreover, it is often difficult to give something as broad a term as “cultural heritage” a value, especially when an area is rapidly shifting.
My paper addresses the issues and concerns associated with preserving urban heritage in Abu Dhabi, UAE, where the city has recently embarked on the next most ambitious wave of urban renewal (Vision 2030 2011). Abu Dhabi presents a unique situation because the entire city—with the sole exception of the eighteenth-century Fort—dates from the modern era (Damluji 2006).

The paper argues that while the cultural heritage in Abu Dhabi has been in vogue, concepts such as “architectural and urban heritage” or “historic urban landscape” are shrouded with vagueness when it comes to their application to the local context. Indeed, for many residents, there exists a sense of ambivalence about all the glass-clad towers now piercing the skyline, for the places of their youth no longer exist.

I also argue that the threat to cultural heritage be seen as part of a wide process of change which is dislocating central structures and processes of modern societies and undermining frameworks of stable anchorage. The inclusion, therefore, of cultural heritage as a central feature of community and economic revitalization is key. The implications of the latter point are far-reaching and open the door for questions relating to conservation planning process vis-à-vis the overall democratization of decision making and political liberalization in the UAE.

In order to elicit local cultural values, the paper employs qualitative research methods, ranging from narratives and analyses written by experts, to interviews of ordinary citizens, and focus groups, to mapping exercises and transect walks conducted in a semester-long planning design studio.

This paper, by closely examining Abu Dhabi’s urban heritage, sheds new light on the neglected yet important episode of the city’s evolution and endeavors to contribute to the ongoing debate surrounding the genesis of cultural heritage.

References

Abstract Index #: 556
THE BINATIONAL DOWNTOWN: CIUDAD JUÁREZ-EL PASO
Abstract System ID#: 1359
Individual Paper

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A seven minute walk through the International Paso del Norte/Santa Fe Bridge separates downtown Ciudad Juárez (Mexico) from downtown El Paso (Texas). Due to the proximity from each other, one could dare to define both downtowns as a regional binational downtown. This paper explores the historical economic forces that developed both downtowns, as well as their interactions and their declines as suburbanization, economic restructuring, and violence took place over time. It also explores the current efforts by both cities of renovating and rebuilding their downtowns. Since thousands of people cross the border each day between each city, this
paper explores this movement of people between two countries as building, rebuilding, and redefining the functions of each downtown. Thus, this paper proposes the concept of the binational downtown as that one that, regardless of the border line, exists because of the complementarity of their functions. The conceptualization of the binational downtown provides grounds for regional planning across borders and provides planners with a basic historical and regional background about these border cities, as they are the closest ones from all the cities in the USA-Mexico border area, and the most economically and socially integrated.

References

Track 11: Planning Process, Administration, Law and Dispute Resolution

Abstract Index #: 557
COMPARATIVE INTERNATIONAL RESEARCH: A CASE STUDY OF AUSTRALIA
Abstract System ID#: 81
Individual Paper
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In recent years there has been resurgence in international comparative analysis in the English-speaking world. As Booth (2012) states, although comparative planning research is difficult, it can “sharpen both understanding and practice if done with ... sensitivity to the cultural embeddedness of planning” (2012, 94). Reimer et al (2014) provide a methodological framework for analyzing comparative international planning research. To examine potential dimensions of change across national planning contexts, they suggest that analyses consider: 1) the scope and objectives of planning; 2) modes and tools of planning; 3) scale; 4) actors and networks; and 5) policy and planning styles.

Planning scholarship in Australia has been active over a period of approximately 50 years and the market for scholarship has increased significantly in recent times. We build on antecedents from Stiftel and Mukhopadhyay (2007) in the American context, to consider to what extent planning thought in Australia is influenced by thought and research from elsewhere. The national affiliation of Authors in two English language Australian Planning Journals are examined over a five year period from 2010-2014 in order to determine the extent of international comparative research.

Using this dataset, we combine elements from Booth (2015) looking at goals and strategies of comparative research with the five dimensions from Reimer et al (2014) to analyse contextual issues in international comparative analyses. In doing so we are building an evaluation framework which could be applied in any country.
DILLON’S RULE VERSUS THE COOLEY PRINCIPLE: REBALANCING LOCAL GOVERNANCE IN NEVADA

Abstract Index #: 558
Abstract System ID#: 84
Individual Paper

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Nevada is a strict Dillon Rule State where all local government powers are solely granted by the state. The Dillon Rule named for John Dillon, a 19th Century Iowan justice, who asserted that local governments are "creatures of the state." An alternate doctrine, handed down by Justice Thomas Cooley, suggests that localities should be able to have some measure of self-determination that has been alternately dubbed "Home Rule." In a state where the fastest growing population is in Southern Nevada, observers have noted that Dillon's rule constrains the amount of governance necessary to address the growing needs of the Las Vegas region. This article analyzes the historical impact of Dillon's rule in the state of Nevada by assessing historic governance adequacy looking at legislative activity since 1947 compared to other states. The paper also compares the amount of bills introduced to the biannual legislative session (known as Bill Draft Resolutions or BDRs) that favor either Northern and Southern Nevada that actually become law. This paper shows that the amount of governance meted out to the entire state has been fairly constant since the 1940s. Ironically, when the state was growing the most, legislation was passed in the 1990s to permanently restrict the amount of bill drafts the legislature would consider. The paper finds that more bills are passed on a consistent basis that favor Northern Nevada than Southern Nevada from the last twenty years (10 sessions). The paper considers the economic and social impact of the unequal delivery of government services and critical infrastructure to Southern Nevada which is still growing.

References

Local sustainability is a complex issue, it is not a traditional function of city government, and it does not easily fit within existing administrative silos. The environmental, economic, and social dimensions of sustainability weave together threads of numerous distinct core local government functions, which may lead to collective action or coordination problems that arise from functionally fragmented authority. Due to its complexity and because sustainability is new to the local agenda, administrative apparatus have not been systematically developed to coordinate its implementation and facilitate policy success. Absent an integrative coordination mechanism, individual policy decisions generate inter-agency spillover effects, lead to inefficient outcomes, and stymie larger city wide sustainability goals.

This research will begin to fill the lacunae surrounding local sustainability administration and functional collective action dilemmas by identifying the formal and informal mechanisms that cities employ to integrate decision making on sustainability. Specifically it will address three questions: (1) What types of administrative mechanisms have cities employed to integrate sustainability? (2) What factors influence these administrative and structural decisions? (3) What effect does the organizational structure and mechanism used to manage sustainability have on the design and implementation of sustainability programs and policy instruments?

These questions will be empirically examined using survey city survey data contained in the Integrated City Sustainability Database (ICSD) and archival sources for a national sample of US cities. Because cities operate within institutional rules established by state government, multi-level employed analyses to more accurately specify the conditions under which various mechanisms to integrate sustainability arise and their consequences.

Abstract Index #: 560

MAKING SENSE (OF PLACE): FACILITATION, SPATIAL REASONING, AND COLLABORATIVE ENVIRONMENTAL MANAGEMENT ON CAPE COD, MASSACHUSETTS, USA

Despite widespread collaborative planning efforts, global water quality continues to deteriorate. Non-point source pollution—and the consequent ecological damage—is not going away. The coastal estuaries on Cape Cod, for instance, are still experiencing declines in water quality due to excess nitrogen loads leaking from individual septic systems. To address this issue, communities on the Cape updated their regional wastewater plan and produced an exhaustive catalogue of wastewater treatment technologies as stakeholders searched for an ideal technical fix.

Technological solutions, however, demand high political and financial costs because the scale of the resource requires their comprehensive application. Individual actions and responsibilities thus need to be realigned in the face of such spatial scale mismatches. To that end, the Cape initiated a comprehensive stakeholder engagement process, which framed participation within shared embayment watersheds. Stakeholder groups met on forty-five separate occasions in 2013 and 2014 to discuss the problem and identify solutions. Professional mediators were retained throughout to facilitate these meetings.

By shifting discussion away from fixed positions, facilitation can foster collaboration by helping participants identify opportunities for joint gains. Yet, mediators and facilitators do more than just broker tradeoffs. Astute facilitation can foster joint cognitive and agency gains, as well. Rhetorical choices - made in the moment by facilitators - can affect how groups comprehend the spatial complexities of social-ecological systems to help them craft more effective plans.
In this paper, I explore how scale-based facilitation moves helped stakeholders on Cape Cod rebuild a shared sense of place. The moves took advantage of active spatial reasoning processes during group deliberation about water quality and wastewater treatment. They promoted a vision of the Cape as a set of shared watersheds, instead of one Cape carved into individualjurisdictional territories.

I analyzed discourse from planning meetings to show how the facilitation moves affected the subsequent flow of conversations. To do so, I recorded meetings to capture verbal exchanges between participants. I analyzed the coded records to identify evidence of active spatial reasoning. I assumed that blends between different scales (e.g. hydrologic and jurisdictional) and levels (e.g. local and regional) represent efforts to address mismatches by the group. I also identified facilitation moves made by mediators to assess their impact on how the group blended the different scales and levels. These moves appeared to take four conceptual forms: spatial-generic/specific, and aspatial-generic/specific.

Results suggest that the spatial-specific facilitation moves helped stakeholders suspend, but not abandon, their individual interests. Instead, they proposed actions that fit the flow of water on the Cape by discursively blending town-based and watershed-based geographies. Conversations shifted toward a sense of the Cape that recognized the spatial interdependencies between individual towns and property owners. Collaboration, in the minds of the stakeholders, became not just a possibility but a requirement. The other three facilitation moves did not appear to prompt similar patterns of conceptual spatial blending. Conversations, by continuing to separate towns and watersheds, failed to engage with the Cape’s complex spatial relationships.

My results show that subtle changes in discursive framing had positive effects on group dynamics. This suggests a practical benefit of training planners to use concrete spatial concepts to shape their talk as they interact with stakeholders. Facilitation also appears to have supported single-loop learning events aimed at rebuilding a shared sense of Cape Cod. This process alone cannot have lasting effects on participants’ beliefs, values, and chosen policies, nor can it call into question the systemic factors driving the problem’s severity. However, if these collaborative processes are sustained over time, more transformative changes may result.

References
and cross-collaborative networks. Through interviews, field observation, and document analysis, we examine network interactions at both the landscape collaborative scale and at the cross collaborative network scale to gather participant perspectives and explain how network activities are shaping restoration practice on the ground. Utilizing a grounded theory approach, we are especially interested in practitioners’ experiences of accountability and responsibility to and with each other. In non-hierarchical network contexts, systems of accountability are less structured and less visible than many contractual intergovernmental or intersectoral relationships. CFLRP participants demonstrate that the principles of felt responsibility and reciprocity afford opportunities for holding themselves and each other accountable. However, individual network participants operate in governmental and regulatory contexts that are constrained by formal monitoring and accountability systems. As a result, when there are competing claims on staff time or resources, it is difficult to prioritize network activities over activities related to regulatory or funder demands. Within this context, we identify how network participants capitalize on the benefits of networks—informality, adaptability, and flexibility—while also maintaining accountability to each other for accomplishing shared goals in conservation and restoration work.

References

Abstract Index #: 562
DERAIL PRINCIPLES: PARTNERSHIPS, PARTICIPATION, AND SOCIAL JUSTICE IN NEW ORLEANS RAIL PLANNING
Abstract System ID#: 477
Individual Paper

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Planning scholars have repeatedly observed how planning practice often works at the intersection of conflicting objectives, with equity being only one of many (Campbell, 1996; Fainstein, 2010). Because of these tensions, planning practitioners and academics need to more explicitly confront how institutions and partnerships are structured in ways that exclude or deprioritize key American Planning Association principles related to meaningful participation, accessible information, and the needs of disadvantaged groups. In this paper, we analyze a case study of a contentious freight rail planning process and through it identify how institutionalized partnerships affect the pursuit of these principles.

The case study involves a proposed rerouting that would move one segment of the New Orleans rail freight network from an affluent, predominantly white community into low-income communities, with high shares of minority residents. For more than a decade, transportation officials, the railroads, and elected leaders from the affluent suburb have been discussing the rerouting as part of ongoing efforts to address regional freight rail movements. In 2013, community leaders, from neighborhoods which would be affected by the rerouted rail system, mobilized to oppose the rerouting. As they sought information, community advocates directly faced barriers to obtaining information. As the situation unfolded, a public agency discouraged planning faculty from technical assistance efforts, including providing community members with background on federal environmental justice rules. Following the public agency’s response, some university-based actors expressed concern that providing technical assistance for the community groups would disrupt funding from and relationships with area transportation agencies.
This paper examines the following question: How did the structure of public and private transportation alliances impact 1) the community group’s ability to engage and obtain information, 2) the approach of public agencies, and 3) the role of the public university? The qualitative case study draws on multiple data sources. We utilize participant observation in the community planning efforts and public meetings, the historic plans evaluating rail capacity and the need for rail improvements, the environmental review documentation, and key informant interviews.

Findings have relevance for planning practice and theory. Through case study analysis, we demonstrate how alliances between private and quasi-public actors impeded the opportunities for public entities and university partners to work towards equity. As a result, using private-public partnerships to meet collective goals can systematically include (Purcell, 2009) powerful firms in ways that shape attention and block progress toward planning’s ethical principles on information sharing, a special obligation to disadvantaged residents, and meaningful public participation. We also argue the shift to academic capitalism (Slaughter & Rhoades, 2004) can impact planning education, as well as influence how university partners interact with community-based partners. We suggest practitioners should design processes that take into account access and information asymmetries. In addition, planning faculty can utilize the protection of the tenure-track and discretion of academic freedom to partner with disadvantaged groups and bring attention to issues that would otherwise go unexamined.

References


Abstract Index #: 563

**GENERATION AND FLOW OF KNOWLEDGE IN NETWORKED WATERSHED GOVERNANCE**

Abstract System ID#: 490
Individual Paper

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Networked governance plays an important role in watershed planning and management due to the need for a broad range of expertise, scarce resources, government mandates, and increased awareness of watersheds as complex socio-ecological systems (Folke 2006; Janssen et al, 2006). Through this research we explore how knowledge for watershed planning and management is created and shared in an urbanizing watershed in NE Ohio. Governance there has self-organized into a complex network of public, private and NGO organizations in a unique model. We sought to characterize the overall structure of the inter-organizational and personal networks as these influence the generation and flow of knowledge (instrumental and tacit) (Pahl-Wostl et al 2007) necessary for effective planning and implementation. Networked governance may foster social learning and other knowledge sharing or bridging that accumulates the experiences needed to cope with surprise and turbulence so that governance of the SES builds adaptive capacity (Pahl-Wostl et al 2007); Innes and Booher 1999).

We use a combination of institutional and network frameworks (Hardy and Koonz 2009; Bodin, & Crona, 2009) to understand both the structure of inter-organizational interactions and the flow of knowledge as these shape adaptive capacity. Our data comes from 20 semi-structured interviews with watershed actors, and document and web page review of more than 200 organizations somehow connected to watershed and land conservation activities. We generate the network structure maps using UCINET software and NETDRAW.
Our research questions focused on: 1) whether patterns of interaction discerned through a network analysis, combined with responses from the interviews with stakeholders, could identify a “core” group of organizations likely to exert the most influence on planning and implementation in general and knowledge generation, sharing, and use in particular; 2) which organizations perform a bridging function to activate “structural holes” (Ahuja 2004) of knowledge in the network, leading to knowledge sharing and perhaps innovation; 3) how organizational participation in more than one type of activity (constitutional, collective policy making and operational) and across different geographies (subwatersheds and jurisdictions) may indicate an important role in generation and diffusion of knowledge; 4) whether and how interactions in different settings (plan making, projects, etc.) allow individuals to learn through social learning and build capacity to adapt to and plan for future conditions in the watershed to enhance resilience of the SES.

Planning educators and practitioners will gain understanding of the long-term knowledge-related capacity-building mechanisms and processes that support watershed planning, policy development, implementation and decision-making. This knowledge will inform scholars engaged in research about water resource planning and management, those interested in social-ecological complex adaptive systems, and those interested in the use of social network analysis software as a research tool.

References


Abstract Index #: 564
THE UNEXAMINED WORK OF CITY PLANNERS: STAFF REPORTS
Abstract System ID#: 508
Individual Paper

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“Much of the real meat of a planner’s work is in reports” (Armentrout, 2003, p. 272) and much of that is in writing a specialized kind of report called a “staff report”. Meck and Morris (2004, p. 2) note, “(w)riting staff reports on proposed developments and permit applications is a core skill of planning practice” yet, “their preparation is a topic about which there is surprisingly little written”. If every U.S. city with 10,000 population or above (2,970 cities) (2010 U.S. Census) has someone writing a staff report every month, that is over 35,500 staff reports per year. This number is probably low because it does not include counties or cities that produce multiple staff reports every month. A review of the planning literature reveals only three works (Erley, 1976; Meck & Morris, 2004; Swift, 2014) specifically on the topic and referencing small samples of staff reports. This leaves important unanswered questions: what is the basic content and structure of these staff reports, what best practices are out there, what does all this work say about the planning profession, and what should we be teaching future planners?
Planners for cities and counties write staff reports in response to applications to subdivide land, zone/rezone property, amend plans, site plan, issue special/conditional use permits, or grant variances. A staff report contains the applicant’s request, background information, a summary of planning staff and other staff input (public works, parks and recreation, etc.), adherence to plans and regulations, analysis, and a recommendation for approval, approval with conditions, denial, or continuance. A planner’s staff report usually goes to a citizen board like a planning and zoning commission and then to the governing body for a final decision. The staff report might not be glamorous, but it is the chief tool planners have to influence short-term decisions with long-term implications.

A sampling frame of all cities ranging in size from 2,500 to over 1 million population in each state in the United States was created. Between 2009 and 2010, cities were randomly selected from each state and contacted via email for an example of a “complex” and a “simple” zoning or similar staff report. 101 cities from 43 states sent staff reports. From this larger sample, we selected simple staff reports from 94 cities in 41 states. The cities represented in the final sample ranged in population from 2,501 (Dillingham, AK) to 8,274,527 (New York, NY).

Using established research on what makes for quality plans (P. Berke & Godschalk, 2009; P. R. Berke, Godschalk, & Kaiser, 2006; Lyles & Stevens, 2014) and the little that has been written on quality staff reports; we created a coding instrument to analyze the major components and formats of staff reports. Our findings indicate that staff report formats are similar, but they do not necessarily correspond to what has been considered the “state of the art” from 1976/2004. There seems to be no difference in the quality or content of staff reports based on city population size or report page length. We looked for staff reports that combined the best of rational theory (fact based, legally defensible content) with the best of communicative/collaborative theory (easy to read, accessible to citizens, inclusivity) (Brooks, 2002; Innes & Booher, 1999). We found very few reports meeting what one might expect of a 21st century staff report drawing on both sets of theories. We speculate that the next generation of staff reports and planners will need to use interactive, electronic media, graphic displays, and, quite possibly 50 years after Davidoff’s famous article, advocacy theory.

References


Abstract Index #: 565

INSTITUTIONAL CONNECTIVITY ACROSS GOVERNANCE PROCESSES FOR NATURAL RESOURCE MANAGEMENT PLANNING

Abstract System ID#: 534
Pre-organized Session: Collaborative Challenges: Scales and Institutions

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Power, agency and the interactions of individuals, and institutions inherently drive the decision-making capacity and connectivity of structures within planning systems. Consequently, it is difficult to understand the dynamics of planning systems without considering the connections that exist between institutions involved in planning processes. Issues of collaboration, integration, and coordination have been at the forefront of planning literature in recent decades as theorists and practitioners recognise the significant influence of connectivity on both planning processes and outcomes. Despite this, there has been limited examination of connectivity and its influence on outcomes in complex and multiscalar planning systems, such as those surrounding planning for
natural resources. Using an analytical framework derived from structural-functionalism, this paper examines the influence of connectivity between institutions on planning processes and their outcomes in two Australian natural resource management regions. The paper draws on theories of network governance, and collaborative governance to discuss its findings and identify lessons for governance analysis and planning practice.

Abstract

FORKS IN THE ROAD: CRITICAL QUESTIONS IN DESIGNING COMMUNITY COLLABORATIVE PROCESSES

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Collaborative decision making processes have become the norm in planning at various scales, from community to metropolitan, regional and national. Process design has benefitted from knowledge accumulated at all scales, including how to convene stakeholders, how to the information base jointly, and how to structure and conduct meetings. Nonetheless, obstacles to success remain. Some are case-specific, hinging on the quality of design and facilitation. We propose to highlight here some aspects of collaboratives that remain problematic at all scales even with good design, needing attention to increase the likelihood of success.

The three aspects we discuss here are:

- Implementation of agreements: even when, by several measures including participant satisfaction a collaborative process has worked well, few or none of the actions agreed-upon take place. While arguably the deliberative processes have intrinsic value, lack of implementation is almost always detrimental to the environment and often also misses opportunities to improve quality of life. We explore reasons, beyond status quo inertia highlighted by Susskind & Cruikshank (1987) and by Layzer (2011).
- Representation: even when stakeholding groups have been comprehensively identified and have representatives in the collaborative process, these often fail to provide the communication link back to their constituents. One consequence can be that uninformed constituents fail to understand the process and the agreement, impeding implementation. We explore this and other aspects of representation including the effects of hidden agendas, and of repeatedly tapping the same people in a community because the agencies know them or because they are able to put in the necessary time.
- Facilitation/mediation: beyond the obvious need for quality intervention, questions include which type of intervention is appropriate in specific cases, whether processes benefit more from outsider or insider intervention, and how much substantive knowledge interveners need along with process skills. For example, collaborative processes emerge around conflicts, proposed initiatives or both; do they call for different types of intervention? Does familiarity with the context or substantive proficiency affect interveners’ credibility and effectiveness? We explore which intervener qualities enhance their effectiveness.

We illustrate these three aspects of collaborative processes with the West Eugene Collaborative (WEC) formed around a contested transportation corridor project. The multi-year project (2007-2009) involved several professional interveners and produced a celebrated consensus document, transforming the public discussion from one about a highway to a “complete street” boulevard. The Collaborative’s strategy reflected the character and strength of the relationships WEC members developed, and increased the community credibility of their vision. About the effort, then Mayor Kitty Percy said, “To me that is a very big deal.” (Pittman, 2009). Months after reaching agreement, WEC members presented it to the state’s Transportation Commission, which was duly impressed by their work and encouraged the Oregon Office of Transportation to work with the WEC to implement project ideas. Despite the impressive process, implementation failed to occur. In this paper, we look at the positive value of the process, and at key decision points which we argue influenced greatly the fate of the recommendations. We use an approach (developed in Kaufman et al. 2014) involving data collected through
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55th Annual ACSP Conference

interviews with key participants and facilitators, documents, and participants’ responses to a survey by the US Institute for Environmental Conflict Resolution.

References


Abstract Index #: 567
THE POLITICAL CONSTRUCTION OF ENERGY JUSTICE MOVEMENT AROUND THE CITY
Abstract System ID#: 551
Individual Paper

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As a 'developmental state', South Korean government has long seen nuclear technology as a primary engine for national economic growth. Unlike the United States that faced strong opposition from anti-nuclear activists during the 1960s, the construction of Kori 1, the first nuclear reactor built near the second largest city in Korea, was met with little resistance from civil society under authoritarian regime that began in the early 1960s following a military coup d'etat. Local residents, many of whom were displaced into adjacent communities, accepted government’s proposal to site nuclear facilities hoping that “electricity-producing factories” would flourish national economy.

Some thirty years later, the recent dispute over the continued operation of Kori 1 revealed the changed political landscape and power relationships. Since the angry public’s initial outburst in 2006 when Korea Hydro Nuclear Power filed its relicensing proposal, Korean government introduced a series of considerable procedural reforms for public participation. How is local opposition to policy decisions to relicense risky old nuclear reactor near the big city mobilized? How did the local communities, environmentalists and local politicians, who seemingly have different interests and political ideologies, negotiate and reconcile their differences, and were able to put forth common alternatives? In answering these questions, this paper examines the role that negotiation plays in historical processes of coalition-building.

References


Abstract Index #: 568
CONTESTED VISIONS OF HEALTH IMPACTS AND BROWNFIELDS REDEVELOPMENT: A CASE STUDY OF CABOT/KOPPERS SUPERFUND SITE IN GAINESVILLE, FL
Abstract System ID#: 733
Individual Paper

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Many Smart Growth solutions stress the importance of brownfield redevelopment as a part of an overall strategy to encourage efficient use of resources. Yet, brownfield redevelopment, and Superfund redevelopment in particular, can be especially challenging and contentious. Developing a common vision for a site and its neighborhood calls for a complex of factors coming into place sometimes over decades, including: The remediation of on-site toxins; agreements between site owners, residents, and officials about the planning process and future plans; understanding and preventing physical and economic impacts on community health.

This paper will examine the process associated with planning for redevelopment of the Cabot/Koppers Superfund site in Gainesville, Florida, from the perspectives of the various stakeholders. This was formerly a creosote treatment plant that used polychlorinated biphenols (PCB), arsenic, and other toxic chemicals, generating residues that include dangerous levels of dioxin. Although the site was designated a Superfund site in 1983, the subsequent planning process was largely informal and disjointed, delaying approval of the remediation plan for thirty years. We will describe the critical contribution that planning could and should make to this ongoing planning process, building relationships of trust and understanding, and negotiating successful remediation and redevelopment with federal, state, and local actors, and facilitating the formulation and implementation of the redevelopment plan.

Approach and Methodology:
This research presents a case study of the planning process associated with the development of the remediation plan and the redevelopment plan for the site and the surrounding neighborhood. The study will include a content analysis of documents related to the project and interviews with residents and public and private leaders involved in the negotiation of the remediation plan.

References
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Abstract Index #: 569
INTEGRATION OF PUBLIC HEALTH IN TRANSPORTATION PLANNING THROUGH KNOWLEDGE SHARING
Abstract System ID#: 736
Poster

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Research has recognized the role of transportation in health outcomes (Corburn, 2009; Frank, Engelke, & Schmid, 2003; Hynes & Lopez, 2009). In response to the call for collaboration in transportation planning to address transportation and public health challenges, organizations have increasingly engaged in collaborative activities at all levels of governments and in the non-profit sector. Despite the encouraging momentum in recent years, the level of involvement from health organizations is uneven across regions and the integration of public health has not yet become a norm of planning practice in many areas. An understanding of the underlying issues related to organizational collaboration is critical for moving the existing momentum forward.
Knowledge sharing is critical for success in organizational collaboration. Network theory and the literature on collaborative planning suggest that authentic dialogue, knowledge sharing, mutual learning, and consensus building are critical elements for facilitating, sustaining, and enhancing network collaboration (Agranoff, 2007; Innes & Booher, 2010; Margerum, 2011). Drawing upon scholarly work in network theory and collaborative planning, we investigate the challenges of collaboration and opportunities for knowledge sharing among public health and transportation planning organizations under the current regulatory and policy environment. The primary data for this study was collected from a focus group interview and an Internet survey of leaders in the transportation and public health communities in the Dallas-Fort Worth Metropolitan (DFW) area. The DFW is an area where both communities are facing significant transportation and public health challenges, and there are few formal regulations requiring the involvement of the public health community in the transportation planning process. Results of this study suggest that there is a distinct gap in knowledge about respective fields. Moreover, knowledge management activities largely rely on traditional face-to-face communications such as conference and workshop. While data sharing and exchange do exist in current practices, there is a lack of utilization and/or creation of shared databases. The study also identifies additional challenges at the policy and individual levels. These findings signify opportunities for education and the leveraging of communication tools for knowledge sharing in the near future. This study demonstrates the usefulness of network theory in identifying challenges and opportunities for collaboration. It also suggests actions for engaging public health organizations in the transportation planning process and potential issues for future studies.

References

This paper argues that serious games can instigate productive boundary work, building bridges and establishing new foundations for groups to address challenges in institutional voids. They can offer low-cost, low-risk opportunities to engage stakeholders and introduce them to emerging challenges, opportunities and connections to their own work in safe sandbox-like simulated environments (Schenk, 2014).

This argument is substantiated based on research with infrastructure managers and other stakeholders in three coastal cities – Singapore, Rotterdam and Boston. Stakeholders were brought together to engage in a role-play simulation exercise, which is a type of serious game. Participants were given a shared hypothetical challenge to address, assigned roles other than those they fill in the real world (to facilitate perspective-taking), and provided both shared general and role-specific confidential instructions to frame the issues and their interests and perspectives. The challenge presented is a transportation infrastructure decision complicated by the release of new information on the potential impacts of climate change. Rather than ignoring these new threats because of their uncertainty and absence from the regulations and norms traditionally followed, the transportation agency in the fictitious case has decided to assemble various stakeholders to collaboratively consider how they might respond. Parties are challenged to consider potential climate threats and possible responses, including issues of uncertainty and responsibility, while protecting their various interests.

A mixed-methods research approach was employed to garner insights from these exercise interventions. Participants completed pre- and post-exercise surveys; extensive semi-structured interviews were conducted both before and after the exercise interventions; the exercises were video recorded for coding and analysis; and debrief conversations, which followed each exercise, were also recorded and coded.

The exercise elicited examination of how dynamic and uncertain threats like climate change that involve institutional ambiguity might be addressed in planning and decision-making by bringing actors together to deliberate. This paper focuses on how participation in the exercises changed participants’ perspectives on the need to engage with each other to advance decision-making in the institutional void, and their understanding of how they can effectively and efficiently go about this type of collaborative engagement. It contributes to planning practice and scholarship around the use of serious games to instigate productive boundary work.

References

Abstract Index #: 571
FRAME OF REFERENCE AND PERCEIVED FAIRNESS
Abstract System ID#: 849
Individual Paper
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Fairness is an ambiguous but common value in many transportation policies. A distinction between perceived and actual fairness is important because the perception of fairness, which plays an important role in people's attitude towards a policy, is not determined by actual fairness of distribution. We adopt a framework of reference-dependent decision theories to analyze how people perceive a policy as fair or not. This perception process involves the selection of reference levels, the mental accounting of gains and losses, the attention allocation to salient attributes of a choice, and the calculation of perceived utility, which are mostly overlooked by traditional analysis in the transportation field. We illustrate these theories in the policies of car license distribution in three Chinese cities, both qualitatively through a review of policy documents and quantitatively via a survey of public perception. The three policies aim to mitigate traffic congestion respectively in Beijing, Shanghai and Guangzhou. Aside from their similarities of quota setting and the proposed value of fairness, the specific distributive rules of the three policies are divergent: Shanghai adopts auction, Beijing does lottery, and Guangzhou does a hybrid. The difference arises from the fact that people from different cities process their mental accounting and select reference levels in different manners. Our finding has practical implications as well. Planners and policy makers should understand the multiple dimensions of fairness and the mental process that people adopt to perceive the fairness of a transportation policy. Since fairness is one critical component of policy acceptance, policy makers should pay attention to both perceived and actual fairness to improve people's acceptance of transportation policies such as VMT taxes, toll roads or congestion charging.

References


This paper examines the use of negotiation to address the challenges of siting locally undesirable land uses (LULUs). The vast majority of the U.S. population directly and indirectly contributes to the production of solid and hazardous waste through manufacturing processes and the consumption of goods. Current methods of waste management depend on physical facilities to inter or treat wastes. Unfortunately, these methods are often associated with air pollution and water contamination. The populations living near these physical facilities are more acutely subject to the adverse impacts than the larger population benefiting from the waste facility. Thus, waste disposal is a classic illustration of a social dilemma where the individual interests of a few conflict with the interests of the larger society, which introduces the concepts of power and fairness into siting procedures. Further complicating the tension between collective and individual interests are the associations among race, ethnicity and income with the location of waste disposal facilities (Bryant and Mohai, 1992; Bullard, 2000).

Compensation (i.e., direct monetary compensation and indirect compensation through safety and monitoring programs) has been suggested as a pragmatic, equitable, and efficient strategy for addressing the adverse impacts of LULUs (Bingham and Miller, 1984). Proponents of the use of compensation recommend negotiation as a method to incorporate compensation to minimize the appearance of bribery, and a number of states have siting processes that legislate a negotiation process (Bingham and Miller, 1984). Yet compensation and its possibility of more expeditious or financially efficient processes must be weighed against the provision of higher
quality outcomes for all stakeholders especially individuals and households from marginalized populations. This paper investigates 1) how power is accounted for in state statutes that authorize and/or require formal environmental dispute and 2) whether decisions negotiated using the prescribed procedures are viewed as successful by all stakeholders.

By combining a content analyses of siting statutes with case studies of communities negotiating about a waste facility, this study investigates how siting procedures account for the disparate power relations and resources that can place low wealth neighborhoods and communities of color at higher risk for the social, biological, and economic hardships associated with the location of environmental hazards. First, siting legislation is content analyzed using a protocol that covers the initiation, participation, negotiation, failure procedures, and implementation of the dispute resolution process. Additionally, Derrida’s deconstruction approach, which emphasizes contextual examination, guides an analysis of how power is stated, ignored, hidden and emphasized within the negotiation procedures described in siting statutes (Lukes, 1983). Next, case studies based on stakeholder interviews, newspaper articles, and public meeting minutes explore the negotiation as well as the pre- and post-negotiation phases (Paterson, 1999) with emphasis on stakeholders (i.e., state agencies granting permits, host communities particularly low wealth and communities of color, non-governmental organizations, and developers seeking the construction of waste facilities) perceptions of success.

The siting of LULUs can pose a risk to the health, safety, and welfare of the surrounding community. Such irrevocable decisions deserve the highest attention not just to the suitability of the site, but also to the process used to negotiate with the host community. Given the association of race, ethnicity and low wealth with the siting of LULUs and the history of marginalization of these individuals and communities, it is imperative that the procedures used to site these land uses be closely monitored for the structural inequality. 

References
efforts towards property rights of Skid Row housed and unhoused residents, and the land and property acquisition practices of South Los Angeles residents, as alternative development models against the historical and systematic practices of hegemonic development in the region.

References


Abstract Index #: 574
THE SMART GROWTH CATALYSTS REVISITED: WHO THEY ARE, AND HOW THEY WORK
Abstract System ID#: 1041
Individual Paper

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In line with the theme of this conference, “Justice and the city: (re)examining the past to create the future”, this paper discusses a specific class of planning advocate, the Smart Growth Catalyst, first featured in a 2005 Planning Magazine article by this paper’s author.

Today, as then, smart growth catalysts think expansively and engage in advocacy work and coalition building. They often provide the spark needed to get smart growth initiatives off the ground by working with regional, statewide, and local groups.

Building on the work of the original publication, this paper presents a more in-depth history of the Smart Growth movement and its advocates, featuring new interviews with Smart Growth catalysts, and a deeper review and analysis of the tradecraft of smart growth advocacy, covering such topics as:

- Messaging.
- How to identify key brokers within institutions and how to work with them effectively.
- How be an effective source of information for elected and appointed officials.
- How to earn coverage for your issues and become a reliable source for the press.

This paper will provide an in-depth analysis of various Smart Growth Catalyst groups, including 1000 Friends of Oregon (and the related 1000 Friends groups in other states), Envision Utah, the Coalition for Smarter Growth in the Washington, D.C. region, the Southern Environmental Law Center, the Conservation Law Foundation, and others.

It will also examine the support for the catalysts' efforts from such national organizations as the U.S. Environmental Protection Agency, Smart Growth America, the Robert Wood Johnson Foundation, the U.S. Green Building Council, Transportation for America, the Natural Resources Defense Council, and other organizations.

References


Abstract Index #: 575

SERIOUS GAMES, SERIOUS LEARNING: AN EVALUATION OF THE EFFECTIVENESS OF ROLE-PLAY SIMULATIONS AS A PUBLIC EDUCATION AND ENGAGEMENT TOOL FOR SCIENCE-INTENSIVE PLANNING ISSUES

Abstract System ID#: 1085

Pre-organized Session: Serious Games for Collaborative Planning

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Science-intensive social and environmental planning issues such as climate change adaptation present a considerable challenge for planners and communities, who must grapple with how to collectively respond despite irreducible uncertainty, differing perspectives, and limited resources and capacity. It has been suggested that role-play simulations (RPSs) offer a promising approach through which to enhance the readiness of communities to collectively tackle such issues. Yet, the effectiveness of RPS exercises as a public education and engagement strategy for science-intensive planning concerns had not previously been systematically tested. This paper draws on the findings of the New England Climate Adaptation Project (NECAP) to evaluate the efficacy of RPS exercises as a public education and engagements strategy for climate change adaptation. Through a series of workshops, NECAP engaged a total of 510 people across four New England coastal communities (Barnstable, MA; Cranston, RI; Dover, NH; and Wells, ME) in playing an RPS exercise; the RPS used in each town or city was tailored to reflect the key climate change risks facing the locality and local political dynamics. Research data were collected through questionnaires administered to all workshop participants before and after the simulation, follow-up in-depth interviews with a total of 140 workshop participants, and ongoing observation. Reporting on the qualitative and quantitative findings from this study, this paper discusses the extent to which participation in the RPS exercises (1) enhanced individual and community literacy about climate change risks and adaptation responses; (2) educated the public about the dynamics of collective risk management decision-making; (3) fostered shared learning; and (4) built support for climate change risk management efforts. It explains what the findings from this study say about how people learn from RPS exercises and what this means for the potential of role-plays as a public education and engagement tool for other science-intensive social and environmental planning issues. The paper concludes with lessons learned for how to effectively design and use RPS exercises for planning support.

References

Abstract Index #: 576

DESIGNING SIMULATIONS AND SIMULATING DESIGN: REPRESENTING VACANCY IN NEW ORLEANS

Abstract System ID#: 1092

Pre-organized Session: Serious Games for Collaborative Planning

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The City of New Orleans contains more than 30,000 vacant or blighted parcels (Plyer and Ortiz, 2012). Though population has been declining in New Orleans since the 70s, dramatically increased vacancy rates tied to Hurricane Katrina have strained the political and social landscape of the city. By 2012, the City had assumed ownership of approximately 10,000 vacant properties (Office of Community Development, 2012). The responsible city agencies, primarily the New Orleans Redevelopment Authority and the New Orleans Department of Code Enforcement, employ multiple management approaches in relation to these vacant parcels. One prominent strategy is to offer vacant lots for sale to adjacent residents, in the popular “lot next-door” program. In addition, vacant lots are offered for sale to the general public through auctions or can be leased by community groups with an interest in urban gardening. Yet these programs have left the city still holding approximately 2,400 vacant parcels that have attracted little or no economic or community interest. Currently, the City mows these lots in order to reduce the appearance of blight in the streetscape at a significant expense. The city’s narrow focus on reducing governmental responsibility, both legally and financially, by selling or leasing single lots, has limited its ability to aggregate and strategically redevelop vacant lots for a broader range of purposes. Where the New Orleans Redevelopment Authority has undertaken strategic aggregation of lots to enable larger scale development, the process has been slow and difficult.

The question at the center of this research project is therefore how to recalibrate the decision-making process about re-using vacant land -- transforming the city’s market-oriented approach into one that is collaborative and data-rich; one that can engage (or re-engage) a new and broader range of stakeholders by fostering creative strategies for obtaining legal access to vacant land and layering stakeholder driven programs. This kind of decision-making requires detailed information, broad participation and the capacity to educate stakeholders about alternative futures for perceived urban problems. Serious games have the potential to convey these complexities to participants in a readily digestible way. Negotiations about vacant parcels can be simulated, placing stakeholders at the helm of projective planning discussions and facilitating their ability to visualize change at the scale of single lots and, more importantly, at the scale of the neighborhood or district.

This project employs a series of negotiation simulations about vacant land in the City of New Orleans. The project augments existing serious gaming methods with a range of visual tools intended to deepen awareness of the spatial implications implicit in planning frameworks and track coalition dynamics during the negotiation process. These tools were developed through policy analysis, semi-structured interviews with 10 stakeholders from New Orleans and iterative testing over a period of 8 months. The outcomes of this participatory research project indicate that 1) these simulations can bring together diverse audiences and allow for the development of new forms of participation in land use planning, 2) by focusing on reaching consensus about the program to be developed on a (set of) vacant parcel(s), new coalitions emerge between stakeholders otherwise unlikely to collaborate on vacant land re-use, 3) relatively simple visual (but inherently spatial) interfaces allow for richer discussion about constraints and possibilities on specific sites, and 4) the spatial programs generated via gaming show promise in leading to new and more robust methods of participatory design. These outcomes suggest a new possible direction for vacant land use planning, in which serious gaming becomes a tool to engage communities while, simultaneously, transforming decision-making norms and practices.

References
Locally designated historic districts are a specific context due to the interaction between traditionally designed areas, culturally significant places, and growing development opportunities. The increasing pace of revitalization and development in these areas can result in conflicts regarding new development due to the competing interests of heritage (historical and cultural importance), preservation (preservation, renovation, and adaptive use), and planning (economic development, revitalization). Communities that have multiple cultural heritages, such as Savannah, GA are particularly vulnerable to such conflicts as the preservation of one heritage can be done to the detriment or exclusion of another (Graham, Ashworth, and Tunbridge, 2005). This can be complicated by the use of regulatory design guidelines, which are developed based on physical architectural characteristics, and are not necessarily equipped to incorporate cultural significance. To bridge this gap, place attachment, defined as the feelings of bonding that occur between individuals and environments that are personally meaningful (Scannell and Gifford, 2010), will be used as a mechanism for evaluating and measuring cultural and social significance of the historic areas and incorporating these factors into the design regulatory process.

This research, a single embedded case study design, explored the relationship between place attachment and the design regulatory process within locally designated historic districts in Savannah, GA to address the primary research question, “Can identifying, prioritizing, and integrating residents’ feelings of place attachment into the design regulatory process ease the tensions between heritage, preservation, and planning by aiding communities in developing consensus?” Data was collected using a web-based survey that measured participant’s levels of place attachment, as well as opinions regarding the importance of specific architectural features and renovations within the historic district. Additionally, 15 follow up interviews were conducted using a participant driven photo elicitation strategy. The data was analyzed using a combination of statistical analysis, GIS mapping, and qualitative analysis.

The results of this study are relevant for planners for several reasons. First, the research identified not only which urban sites and structures highly valued by the community, but more importantly why they are significant. While identified places might be important to different members of the community for different reasons, urban planners and other decision makers can still establish consensus on the importance of preserving specific aspects of the identified sites. Secondly, the results reveal specific architectural features that are critical to creating and maintaining place attachment, which would allow for more targeted and precise design regulation. Finally, these results can inform multiple aspects of preservation and planning practice, such as developing long-term development strategies or broadening outreach campaigns. A deeper understanding of these issues could influence development at the local level, as well as become integrated into regional and national level policies and strategies.

References

Abstract Index #: 578
LESS DEALMAKING AND MORE PLANNING, PRACTICE AFTER KOONTZ
Abstract System ID#: 1305
Individual Paper

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Koontz v. St. Johns River Water Management District was a case involving wetlands mitigation. The developer was offered the option of developing more of his site if he gave a monetary contribution for off-site mitigation. It was just an option, and he declined. The government "took" nothing. Yet, he sued for a Taking and won. The
Supreme Court decided in his favor and the Florida state courts ultimately awarded "temporary taking" damages and the right to develop the property free of the offensive condition. This paper explores the practical consequences of the Kootz decision in the context of current planning practice and developing caselaw.

Before Koontz, not all courts allowed takings lawsuits where demands were for money, as opposed to property. And, it wasn’t clear that you could bring suit when you didn’t submit to the demand. The claim in Koontz was under a rule of takings law that puts the burden of proof on the government to demonstrate that mitigation requested is related and roughly proportional to impacts created by the development. Planners need to be aware that courts may now require more planning in contexts where planners have historically engaged in considerable deal-making. Although the lawsuit was dismissed as premature, Seattle's density bonus program was recently challenged.

Cities have developed many optional programs to encourage sustainable development that include increased development rights in exchange for favorable concessions. These optional programs create "win-win" solutions, but sometimes ask for concessions that are not closely related to impacts created by the development. Some cities, for example, have allowed increases in density and height limitations in exchange for affordable housing construction or "in lieu" fees without strictly adhering to an "essential nexus" and "rough proportionality" analysis. Meeting this standard can be particularly difficult in the context of aesthetic or quality standards that are not easily quantified.

The Supreme Court in Koontz said that the government need only offer one constitutionally viable option. Relying on that language would suggest that there is no problem with optional density bonus programs so long as the underlying zoning is sound. However, the facts and reasoning in Koontz are problematic. The developer had the option of developing a smaller portion of the site and there was no argument that option wasn't economically viable. Yet, the Court reasoned that the availability of the option was irrelevant because it was not consistent with the developers plan. Following this reasoning, if a developer "plans" to build in excess of standard zoning, it is not clear that the fact of the underlying zoning will create a safe harbor from takings challenges.

There has been considerable confusion as to when to apply the "essential nexus" and "rough proportionality" standards, but legislatively created standards are most likely to receive deferential review. Heightened scrutiny has been justified where the context creates some reason not to trust the government. If the government is asking for property, it may try to evade the "just compensation" requirement. However, many courts have reasoned that legislatively created conditions are different because the political process provides an opportunity for correction. It is much harder for the government to engage in "extortion" in the context of broadly applicable requirements. Although this approach removes flexibility from the process, this paper concludes in favor of more planning and less deal-making and makes suggestions for planning practice and legal reform.

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- See Ehrlich v. Culver City, 911 P. 2d 429 (Cal. 1996)
- See Mira Mar Development Corp. v. Coppell, 421 S.W. 3d 74 (5th Dist. 2013) (applying heightened scrutiny "essential nexus" and "rough proportionality" analysis to engineering standards including rolled curbs, a drainage pipe extension, and landscaping requirements where nothing was "taken" from the developer)
Issues of resiliency have generated much recent attention in planning scholarship and practice with how city and regions bounce back and endure after disasters and extreme events (Gasparini et al, 2014; Goldstein, 2012). Planning and funding efforts can be blocked by conservative legislators and activists who question the role of public funding and government, particularly at the federal level. Planning also can affect property rights and property values when there are changes to local zoning and infrastructure projects are planned and implemented (Jacobs, 2012).

Building from research on conservative activists opposition to planning (Trapenberg Frick, 2013, Whittemore, 2012), I explore conservative views on the role of government, property rights, infrastructure planning, and public participation when planning for resilience and in the wake of recovery. The goal of the research is to find areas of common ground from across the political spectrum to chart a way forward.

Literature related to resilience, Tea party and property rights activism, and communications/new media studies guides the analysis. The research is based on content analysis of key documents and online sources, and in-depth interviews with activists and elected officials across the United States from across the political spectrum. I look specifically at the discourse and narratives surrounding federal emergency relief legislation and with a special attention to Hurricane Sandy in 2012. Through these channels, I analyze the range of concerns and perceptions, the role of technology and social media in disseminating messages and outcomes to date.

References

Track 12: Planning Theory

APPLYING HAWAIIAN ANCESTRAL KNOWLEDGE TO CONTEMPORARY PLANNING

The central theme addresses the ways in which societies can accommodate multiple epistemologies and ontologies through land use planning. I utilize Indigenous planning as an entry point into this examination. Specifically, I ask how do we apply Hawaiian ancestral knowledge about ʻāina (loosely translated as land) to contemporary planning contexts in Hawaiʻi? By using Hawaiian ʻāina based public charter schools as a site of planning inquiry, we may begin to understand how Hawaiian public charter schools, as nonprofit driven institutions, articulate the ways in which ʻāina influences their ways of knowing and ways of being. In turn, I apply those ways of knowing and being to a planning framework to create a space where Indigenous knowledge can make a greater contribution to the field of planning.
The Hawaiian public charter school movement is an extension of the Hawaiian activist movement of the 1970’s. The Hawaiian movement coalesced as aggressive pro-urban development policies were ushered in through the Hawai‘i state land use plan that was established in 1961. I will highlight how pro-urban development policies that targeted rural Hawaiian communities such as Kalama valley on O’ahu island served to galvanize Hawaiian resistance through the philosophy of aloha ʻāina (love of the land) and mālama ʻāina (care for the land). I will further illustrate how these two concepts have become fundamental pedagogical platforms for many ʻāina based Hawaiian charter schools beginning in the 1980’s.

One of the unique markers of the charter school movement in Hawai‘i is the presence of Hawaiian-focused public charter schools. More than half of the charter schools in Hawai‘i identify as a Hawaiian focused schools that tend to be small scale, community based, and staffed by a large percentage of Hawaiian teachers. I draw upon key findings from this qualitative research project to theorize an Indigenous planning framework that outlines 1) a genealogy of knowing that is relationship based rather than economistic and 2) a utility of knowing that realigns question framing and analysis that privileges the Indigenous point of view.

References

INFUSING JUSTICE WITH COMPASSION: A NEW ETHICAL APPROACH FOR PLANNERS?

In its aspirational principles, the American Institute of Certified Planners’ Code of Ethics reads:

“We shall seek social justice by working to expand choice and opportunity for all persons, recognizing a special responsibility to plan for the needs of the disadvantaged and to promote racial and economic integration. We shall urge the alteration of policies, institutions, and decisions that oppose such needs.” (AICP 2009, A.1.f)

Despite being a core principle of planning ethics, social justice often feels like an elusive imperative. What planners ought to do and what they believe they are able to do are may diverge significantly. As divisive politics push communities further apart, issues of fairness suffer from controversy or outright neglect. It is little surprise, then, that equity, the third of the so-called “3 Es” of sustainability, has proven hardest to accomplish. But what is missing from our efforts?

This paper examines theoretical concepts of compassion as a potential means to enhance and activate social justice in planning practice. Although it may be argued that justice stems from compassion or concern for the wellbeing of others, it is uncommon that the two concepts are explicitly linked. To explore potential connections and mutual reinforcements, we will examine the ethical foundations of compassion in both philosophy and religious traditions. We then compare these insights with key ethical theories in urban planning, including utilitarianism, deontology, and John Rawls’ theory of justice, which McConnell (1995, p. 33) considered as an ethical theory *for* planning.
The second part of the paper examines recent research in neuroscience that has identified clear brain changes and health benefits associated with compassionate practices such as meditation, mindfulness and prayer (Davidson 2012; Newberg 2010). We will draw on findings from these neuro-scientific studies and consider their potential relevance for planners. Our paper will develop a conceptual framework for incorporation of compassion as a guiding principle of planning, including preliminary ideas as to how planning processes might use compassionate practices as tools to advance the goal of social justice.

Accredited planning programs must and do teach planning ethics, but lessons on the implementation of ethical principles in practice are considerably more difficult to impart. A focus on compassion may provide a means as well as an end and thereby elevate both planning education and planning practice.

References

Abstract Index #: 582
PLANNING’S LEGITIMACY: EXPLORING AMARTYA SEN’S CONCEPTUALIZATION OF FREEDOM IN AFFIRMING THE ROLE OF PLANNING AS ENABLING FREEDOMS
Abstract System ID#: 64
Individual Paper
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Over the decades planning has faced its fair share of scrutiny - internally and externally (Klosterman, 1985). The external challenge to planning’s relevance and utility has for the most part been espoused by adherents of free market economics, and planning’s validation has arisen from the failure of the free market to address wicked problems (Rittel & Webber, 1973; Klosterman, 1985). This paper presents an alternative and additional rationale for planning’s legitimacy – one that is embedded in Amartya Sen’s work on freedom. While planning discourse has not paid much attention to the enhancement of freedoms, planning practice has engaged in restricting individual freedoms - through zoning, comprehensive plans and local government action – but also in enabling freedom when planning has worked to reduce spatial disparities and other injustices. Hence it is prudent for the profession to reflect on how we as planners engage in the act of enabling and hindering freedoms, for as demonstrated by Sen, the ideal of freedom holds many avenues for pursuing justice and equity. Drawing on the philosophical underpinnings of freedom and the conceptualization of freedom developed by Sen, this paper proposes that planning can in large part be turned into an enterprise committed to expanding freedoms afforded to citizens.

Sen’s conceptualization of freedom expands over several decades and through multiple papers. In this paper I present a cohesive and coherent understanding of freedom developed by Sen, weaving together the different elements of this conceptualization covered in multiple publications. Sen offers a conception of freedom that is embedded in equity, where systematic inequity is framed as unfreedoms that need to be removed to expand individual liberties. Removing unfreedoms needs to be coupled with improving people’s capability sets by increasing opportunities available to them. Capability sets reflect the freedom to lead multiple possible types of life (Sen, 2008), which increases when substantive freedoms are made possible. Substantive freedoms are related to the intrinsic role of freedom – ends of freedom – which include literacy, avoidance of malnutrition, escapable morbidity and mortality to name a few. Therefore, to expand human freedoms, substantive freedoms must be
guaranteed which increases capability sets leading to increased opportunities that contribute towards alleviating systemic injustices and inequities leading to expanded freedoms.

Planning in Sen’s conceptualization can be seen as securing substantive freedoms – for example by reducing spatial disparities - that would inherently expand citizen’s capability sets, enabling them to achieve more. In applying this framing of freedom, if then planning gives deference to reducing food insecurity, spatial disparities or addressing other land use issues related tied to justice, planning is in effect helping to expand human liberties, not infringing upon them. Sen’s conceptualization of freedom offers planning an opportunity to reassess and realign priorities, to strengthen and enable an active citizenry, capable of fully participating in a functioning democracy. This paper concludes that Sen’s conceptualization of freedom is conducive to planning in re-articulating a defense for itself that is embedded in enabling freedoms.

References


Abstract Index #: 583
PLANNING IN THE FACE OF ETHICS
Abstract System ID#: 80
Individual Paper

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If planning is really spatial ethics as Robert Upton (2002) asserts, then what accounts for planners’ ethics? What affects planners’ ethical decisions?

Planners face situations every day that they have to resolve in a professional, moral and ethical manner while simultaneous attending to the political atmosphere where they work. Daniel Wueste says, “Ethical issues arise in situations where action (or inaction) will have a significant impact on human well-being” (2005: 70). Actions that influence human well-being are generally the types of challenges that planners face each day.

This research is significant to planners and the communities they work in. Planners, as most professionals, have a code of ethics, the American Institute of Certified Planners (AICP) Code of Ethics and Professional Conduct. This code can conflict with what the politicians and/or the community wants the planners’ role to be. Do planners use their professional code of ethics? What contributes to a planner’s ethical decisions, why would they use the AICP code of ethics? Is it their experience, their education or their knowledge of the code that directs their decisions?

Elizabeth Howe and Jerome Kaufman, albeit with a different purpose, performed a similar survey in 1979. Howe and Kaufmann used ethical scenarios to determine planners’ roles; this research uses similar scenarios to determine the ethical decisions that planners make. This current survey of planners can determine if planners make decisions using the AICP code of ethics or not. There are many types of planners working in a variety of contexts and a survey is a good way to gain insight into who is more likely to use the AICP code. Research on ethics has been sparse and generally on ethical roles; this research is different because it evaluates the use of the AICP code involved in planners’ choices.
This research uses a questionnaire to solicit planners’ responses to various ethical scenarios. Each scenario will have five choices, one from the AICP rules of conduct, another from the AICP aspirations and the three remaining choices outside of the AICP code. The independent variables are various proxies for level of experience: age, years of service, position, education, and licenses/certification. Work context is a control variable. The survey is a cross-sectional design web survey with thirty questions (mixed type: multiple choice, open ended). We are seeking a large sample of planner responses (given a population of 37,750). Emails with a link to the web survey will be sent to the entire American Planning Association (APA) membership. We are unable to do a random sample therefore the demographic statistics from the respondents to the survey will be compared with the parameters of the entire membership. This information will be used to see if the sample is representative or not and to assist in interpretation of results. The results of the survey are used to analyze the effects of the various proxies for reasons to make ethical choices.

Our practical experience suggests that planners are likely not to use the AICP code early in their work careers, then they will use an AICP code soon after receiving their certification, but as time goes by will begin to rely more on their experience to make decisions. This may lead them to construct other than AICP code. Whether or not these expectations are realized, the findings will be useful in developing pedagogical approaches for planning educators in the university, for AICP certification maintenance (CM) sessions at professional conferences, and for considering revisions to the AICP code of ethics. Finally, our findings should suggest avenues for future research in perhaps quasi-experimental treatments to be used in AICP CM workshops that would allow us to explore causality more directly. These quasi-experimental results would feed back into university planning education, professional certification maintenance sessions, and future AICP code of ethics evaluations.

References
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Abstract Index #: 584
A POLITICAL ECOLOGY OF DESIGN: CONTESTED VISIONS OF URBAN CLIMATE CHANGE ADAPTATION
Abstract System ID#: 123
Individual Paper

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From the eastern seaboard of the United States to coastal cities in Southeast Asia, severe weather events and long-term climate impacts challenge how we live and work. As the debates over cities, planning, and climate change intensify, governments are proposing increasingly ambitious plans to respond to climate impacts. These involve extensive reconfigurations of built and “natural” environments, and massive economic resources. They promise “ecological security,” that is, safety from climate impacts, and the perpetuation of capitalist growth. Yet they often involve intractable social questions, including decisions about how and what to protect on sites that are home to already marginalized urban residents.

Scholarship on urban adaptation planning has tended to reinforce divisions between social and spatial, drawing a line between engineered solutions and sociopolitical measures. It has also assumed urban politics to be contained and cohesive, with large-set city surveys missing the real life politics on the ground, and in-depth case studies underplaying broader links and processes. And it has relied on static conceptualizations of the city as a bounded territory, neglecting interconnections across networks and associated processes of urbanization.

My paper, part of a broader study on the urban spatial politics of climate change adaptation, is posed as a counterpoint to these dominant discussions. Exploring what I call a political ecology of design, I investigate sites
and strategies in three cities, New York, Jakarta, and Rotterdam. Looking, on one level, at city and national initiatives, including Rebuild By Design in New York, the “Great Garuda” sea wall plan in Jakarta, and Rotterdam Climate Proof, my paper also searches out alternate narratives – the “counterplans” – including community resiliency in Red Hook, Brooklyn, and grassroots design activism in the informal “kampungs” of Jakarta. I focus on these contested visions, the interconnectedness of local and global relationships, and the role of design in urban adaptation. I ask, in the face of climate change and uneven social and spatial urban development, how are contesting visions of the future produced and how do they attain power?

I ground my research in theories of sociospatial power relationships – the social production of space (Lefebvre, 1991), urbanization and uneven development (Harvey, 1985; Smith, 1996), spatial justice (Soja, 2010), and the geographies of policy mobility (Peck, 2011; Roy & Ong, 2011). I also look to theories of the interrelationships between social, ecological, and technological processes in and through cities (Bulkeley et al., 2011; Hodson & Marvin, 2010). In essence a mixed methods, multiple case study, I combine semi-structured interviews with field and participant observation, and spatial and visual methods. I build on frameworks for a more reflexive approach to case selection and analysis (Burawoy, 2003; McMichael, 2000) and a relational reading of sites – each understood through the others (Amin, 2004; Massey, 2011; Roy, 2009). In Ananya Roy’s words, “to view all cities from this particular place on the map.”

I find that, 1) in this new landscape of climate policy mobilities, urban adaptation projects, globally constituted, reflect local urban sociospatial systems, 2) climate change motivates relationships, but plan objectives often transcend-climate specific goals, and 3) the production of alternative visions – “counterplans” – opens terrains of contestation, enabling modes of organizing and resistance to hegemonic systems. These findings emphasize the agency of marginalized urban communities, the sociopolitical role of design, and the embeddedness of climate change responses within multiple scales and levels of global urban development. They imply that planners committed to equitable outcomes and invested in planning for climate change need to engage urban scales and networks, learn from and contribute to political organizing and coalition building, and envision social and spatial change together.

References
future means when archiving the past. Are the past and the future fundamentally separate planning objects, or can these goals be reconciled? Establishing preservation as a relevant and vital practice in the twenty-first century means re-envisioning its very purpose. As the discipline has matured and the NHPA is reaching 50 years, the time is ripe to advance preservation planning’s theoretical foundation. This paper argues that a new conceptual framework of preservation must also engage sustainability: addressing the temporality of the built environment and the elusiveness of historical truth in the framework of environment, economy, and equity. To do so, we first discuss the widening scope of preservation and the way it has worked with - and sometimes against - sustainability in the past. Next we reinterpret the 3Es within a new conceptual framework of cultural sustainability. Finally, though targeted case studies, we explain how practitioners can use this new framework to more effectively plan for the future while honoring the past.

References

Abstract Index #: 586
INDIGENOUS PEOPLES AND THE STRUGGLE FOR CO-EXISTENCE IN PLANNING: AGONISM AS A DECOLONIZING PRAXIS?

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Discussion about Indigenous peoples in planning is now gaining traction in the field, to such an extent that at least some of that discussion now centres on the question of how to begin decolonizing planning theory and practice (e.g. Porter 2010; Howitt and Lunkapis 2010; Sandercock and Attili 2013; Ugarte 2014). While considerable effort has gone into the critique that underpins calls for decolonizing planning, we have not sufficiently grappled with the conceptual, empirical and practical tools that might be needed. This paper engages with these critical issues and draws upon thinking presented in the final chapter of our forthcoming book, Planning for Co-existence? (Ashgate). Our book seeks to advance conceptual and practical understanding of Indigenous peoples’ struggles for co-existence in planning: the struggle to “share space” (Howitt & Lunkapis 2010) but also to (re)create space for the expression of distinct cultural identities (Porter 2013). The book highlights the stories of four Indigenous nations - two Canada and two Australia – who are struggling for co-existence in the face of rapid urban and/or natural resource development.

This paper frames these stories as examples of agonistic practice (Mouffe 2003, 2005; Bond 2011; Hillier 2003; Ploger 2004) that unsettle planning in these places. Our case stories reveal the complicated ways Indigenous people engage in planning: ways that often deliberately circumvent formal planning processes (legal action and physical blockades being two examples) in order to expose and resist the persistent power of colonial (white) privilege and to create space for the resurgence of Indigenous ways of being, acting and knowing. Even when these expressions of Indigenous agency are enacted within formal planning processes, our cases reveal that it is doing much, much more that simply moving towards collaborative planning solutions. Indigenous peoples are actively ‘unsettling’ the very idea of planning. As several critical Indigenous theorists note, such acts of unsettlement is absolutely central to radical theories of decolonization (see, for example: Tuck & Yang 2012). We see theories of agonism and agonistic planning as effective tools for better understanding the ongoing work of unsettlement. They not only identify and respect the plural and often incommensurate lifeways and values that
shape (post)colonial planning contexts around the globe, but these theories also see conflict and struggle as essential to the negotiation of some sort of co-existence. It is through conflict and struggle that hegemonic ideas about the desired processes and outcomes of planning become unsettled and new ways of co-existing with Indigenous peoples can begin to emerge.

These stories, then, have much to teach us about the ways in which Indigenous peoples are already engaged with planning, and thus help develop more precise conceptual and practical ideas for how to contribute to a decolonization of planning. By drawing together the current literature on agonistic planning and then connecting it to the politics of recognition, this paper presents a more critical framing of how planning ought to respond to different identity positions: one that embraces the role of conflict and that frames such political passion and struggle as key elements of counter-hegemonic planning practice.

References


Abstract Index #: 587

SOCIAL INNOVATION THROUGH TRANSLATION: AN ACTOR NETWORK THEORY CASE STUDY OF FIVE GRANTING AGENCIES COLLABORATING IN BRITISH COLUMBIA.

A range of social actors have adopted new initiatives couched in social innovation rhetoric; but to move beyond the rhetoric into concerted, meaningful action can take time, effort and a significant shift in how agencies conduct their core business. This has certainly been the case for various grant-making agencies focused in Vancouver and the Province of British Columbia that provide non-profit and Aboriginal agencies with grants to enable various socially beneficial activities in communities, ranging from the development of a next generation urban food security system to a block-by-block strengths focused neighborhood outreach program. And, it can be both challenging and rewarding when those same agencies, with different organizational cultures, different organizational goals, and serving different geographies assemble to promote social innovation.

This case study describes one such effort by five funders through a shared training and granting initiative by the Vancouver Foundation, Community Action Initiative, City of Vancouver, First Nations Health Authority, and Vancouver Coastal Health Authority, which took place from Summer 2014 through to Spring 2015, and was independently evaluated. The case provides several robust illustrations of the actor network theory concept of translation, using several dimensions. First, it shows how translation has been used to create equivalencies (Callon, 1980; Latour, 2007) between agencies serving different geographies and mandates – a task which produced a formal letter of agreement (LOA) signed by each of the agencies, and articulated these equivalencies in a relatively complex albeit transparent manner. Second, it focuses on the performative dimension of the translation work (Brown and Capdevila, 1999, drawing from Serres), recognizing that the interpretations and actions of the agencies involved in the partnership were critical in breathing life into the LOA and the interagency network itself. Related to this performative dimension was a shared learning component, wherein each of the agencies had to come to a shared agreement on what constituted social innovation, because the latter formed core component of the training and granting project, and was facilitated by an external trainer with nationally-
renowned expertise within Canada on social innovation. (In essence, each of the agencies was called upon to learn about a new approach to social innovation and perform that approach in its collaborative selection of recipients of a special training and small grant opportunity.) Third, it also draws on the notion of metaphor which, while not explored within the ANT literature, comes from the complementary scholarship Dvora Yanow. Metaphors share translation’s goal of building common understanding between people, but specifically achieve this end by placing two opposite ideas together in ways that generate a new idea (2000:42). Where actors within a network can contrast ideas from their own experience with the experience of members of those in another group (e.g. where one actor can walk another how a key aspect of his agency’s granting process may contrast with that other agency’s), those actors’ potential ability to support applied innovation within the network increases. Finally, the case also explores how trust among network actors facilitated the translation process (see Murphy, 2006), drawing from a combination of prior relationships in different contexts among some of the key players and some overlapping network memberships.

References


PLANNING THEORY AND THE NEW MATERIALISM

Abstract System ID#: 219
Pre-organized Session: Planning Theory and the New Materialism

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Things, rule-making and planning in the material city

One of the main contributions of actor-network theory (Latour, 2005) and assemblage (Beauregard, 2012) to planning is a different understanding of urban materiality, no more regarded as the passive background of urban life, but as a site of power, the locus where the social, technical, political, and economic come together as a “relational processuality of composition” (McFarlane, 2011, p. 652). The material city thus represents a field of possibilities for a networked form of contemporary citizenship to arise throughout relations between humans, non humans and things.

To acknowledge the political role of materiality we need, preliminarily, to acknowledge the limits that planning has traditionally imposed over things, the specific ways and forms by which it has reduced the inanimate world to a disembodied voice.

One of the ways that the world is disembodied occurs when the formal/informal relation is structured as a normative divide with the formality as the power meta-language driving the definition of what is outside its jurisdiction – informality (Lieto and Beauregard, 2013). Many sites, things, and objects play a role in how political subjectivities are achieved and performed in the contemporary city, but their heterogeneous and fluid materiality may escape the normalizing grip of planning as a state action with coercive powers. Consequently, these sites, things, and objects are typically relegated to the realm of the informal, whatever the consequences (e.g., eviction and demolition of informal settlements or the legal entitling of land).
The paper essentially deals with formality, and takes rule-making as one of its relevant constituencies in the planning field. Reference standards, ground rules and coordination schemes are the main variations of such a constituency as well as distinctive features of plans and policies. Through examples of informal practices related to formal planning issues in Napoli and New York City, the paper provides evidence concerning how formal rules deal with the material city in order to gain legal and social effectiveness, how rule-making ‘comes to matter’ by a selective process of abstraction and generalization, stripping matter of its heterogeneity and contingency (Lezaun, 2012), and what happens ‘on the ground’ of everyday practices when a formal rule enters the material world.

The paper’s claim is that things have politics (Latour, 2004): like words, they matter beyond their physical consistency and apparent inertia, provided that planners are willing to blur the boundaries between formality and informality, inspired by a relational idea of materiality, and reconcile both categories within the same conceptual frame inspired by actor-network theory and assemblage thinking.

References


Abstract Index #: 589

TOWARDS A NEO-STRUCTURAL METHODOLOGY FOR URBAN AND REGIONAL DEVELOPMENT ANALYSIS

In this session, we discuss Professor Frank Moulaert, Professor Flavia Martinelli and Professor Andreas Novy and their colleagues’ proposal for a new DEMOLOGOS methodology in urban and regional analysis. The acronym DEMOLOGOS stands for Development Models and Logics of Socio-economic Organization in Space.

Current mainstream methodologies for the analysis of socio-economic development in space and time have problems addressing the connections between different themes of development, types of explanation, the role of history and the links between different geographical perspectives and scales.

The DEMOLOGOS methodology finds its theoretical basis in different contributions from, among others, ‘old’ institutionalism, regulation theory, cultural political economy, radical geography, and critical planning literature. These theories taken together valorize the memory of more than two centuries of historical and spatial analysis and allow to develop a multi-dimensional operational mode of scientific investigation for the analysis of different urban and regional trajectories.

Significant components of this methodology are:

- Thematics inspired and conceptualized by use of the theoretical legacy, with a contemporary turn, are developed and used to organize the analysis of structural transformation, institutional change, strategic agency and socio-cultural development in cities and regions. Each thematic takes on board its inherent contradictions, especially the thematic Development Past Present Future that embodies the tensions between development as a material trajectory and development as change agency. Other thematics are: Agency, Structure, Institutions and...
Themes that are relevant to the individual urban and regional trajectories are also selected within the DELOMOGOS reading of spatial development: Views of Development; Democracy and Authoritarianism; Equality and inclusion vs. Polarization and Exclusion; Crisis and Change. Thematics are then used to build a meta-theoretical framework that is used to ‘lead’ the different case-studies. Depending on the development themes selected in the study, some thematics will be privileged over others in the meta-theoretical framework. For example, the investigation of the role of discourse in the definition of innovation policy in a given regional system, will privilege a combination of ASID and CDIH to build its meta-theoretical framework.

Guided by this meta-frame the analysis of each urban and regional trajectory involves the study of: change and spatio-temporal fixes (periodization, space-time emblematic moments); inter-scalar dynamics of agency, structures and institutions; institutional dynamics (innovation and transformation, regulation and deregulation, institutional discourses, ...); the role of power as a social relation (control of resources, the strategic material and discursive selectivity of forms, institutions, organizations, and interpersonal relations, the structural-institutional dynamics of hegemonic and counter-hegemonic forces); discourse analysis.

Dialectical reflections on the contradictions and spaces for action between hegemonic and alternative development strategies, i.e. the potential for path-braking and path-shaping are an important final focus of the methodology.

Two of the authors will speak at this panel. Prof. Moulaert will explain the methodology, while Prof. Martinelli will explain how the methodology was applied to some of the case studies contained in the book.

References

NEGOTIATING GOVERNANCE AND PLANNING IN AUTHORITARIAN REGIME

In the discipline of planning, international development usually means planning in a state of authoritarian nature or, at least, in an environment with minimum meaningful public participation. As discussed by Zhang (2000) regarding challenges of Chinese planners, a main challenge was “planning as a government function has to follow government leaders, but how to ‘tell the truth to power’ and rectify consequences of wrong decisions made by the power?” This is still the biggest challenge for planners today in China and other countries of authoritarian regime. When planners are faced with limited information resources based on which they can form opinions, as well as limited exits they can publicize their opinions, planning practices are predictable and inevitably reduced to acclamation.

This paper draws from my case studies on the development paths of Special Economic Zones in China, in which I studied how inter-governmental negotiation—explicitly through open communication and interactions and implicitly through non-compliance, rule violation, or other tacit strategies—works as a key mechanism to engender development strategies that bring about different paths of development was examined. Specifically in this paper, I focus on exploring planners and planning’s roles in these bargaining processes: who shapes economic development plans and do public planners have the autonomy they need? What planning and planners can do when meaningful public participation is absent?
In his recent work “The Kingdom and the Glory,” Agamben demonstrated how early Christian theology became the paradigm of current economics and government (Agamben, 2007 and 2011). Agamben argued that these two political paradigms from Christian theology shadow the contemporary paradigms of sovereignty and economic government. They also shadowed the paradigms of absolutism and democracy, which actually originated from the same source. By investigating how economy entered into Christian theology as the by-product of Trinity, what Agamben actually showed was the inseparability of the seeming conflicting poles, which rely on and coordinate with each other in a “bipolar governance machine” (Agamben, 2011). The two powers coexist and oscillate in one machine, even though sometimes one pole may be dominant.

Following this argument, I then apply Agamben’s concepts of acclamation and inoperativity to develop my ideas on what roles planners and planning play in an authoritarian regime. I then go on and argue for the new directions of planning and planners should take in authoritarian regime and developing countries of authoritarian regime.

References
1980), as the collective struggle of subjugated knowledge in everyday travel experiences, be included within the transport discourse.

The findings demonstrate that the transportation modeling process is a discursive practice—wherein its assumptions produce outcomes—as shown in the disparity in travel distance and moving time from participants’ travel diaries. The travel diaries show that in average, participants from lower income households travel further and longer to reach their destinations, compared to participants from higher income households. For participants, resistances take the form of daily travel decisions like trip-chaining and carpooling. Collectively, these daily decisions can alter the way planners think about future travel demands when engaging with the transportation modeling process. For planners, resistances take the form of selective representation and deliberative practices when validating outputs from transportation model. Understanding the transportation modeling process as a discursive practice, and identifying resistances to disciplinary power, provide openings for praxis in inclusive regional transportation planning. Public outreach and engagement efforts can focus more on including everyday travel experiences rather than insisting on public meetings. Additionally, the paper contributes to potentials of technology to be used in the co-production of knowledge about future transportation needs rather than inhibit meaningful participation.

References


Abstract Index #: 592
PERFORMING PROPERTY CYCLES: HOW ACTOR NETWORKS TURNED A BOOM INTO A BUBBLE
Abstract System ID#: 288
Pre-organized Session: Planning Theory and the New Materialism

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Economists characterize fluctuations in property markets as “cyclical” in that characteristics repeat and recur instead of being isolated or random. Like the general business cycle, these periods typically have four parts -- an expansion, a slowdown, a downturn, and a recovery -- and are represented as short- or long-wave oscillations. Starting with Wesley Mitchell and Homer Hoyt in the 1920s and 1930s, economists have tried to empirically measure the length, frequency, peak, trough, amplitude, and speed of these cycles and to search for explanations for them.

I argue that, despite its utility, the metaphor of a construction cycle naturalizes change and distracts us from the social relations underpinning movement and transformation in property markets. In contrast I take an institutional approach rooted in the actor-network theory that exposes how social constructs, market devices, and political interventions help keep property capital in motion. During ten years of ethnographic field work in Chicago’s commercial real estate sector, I identified a set of local professional practices that were critical to that city’s Millennial construction boom (roughly 1998-2008). Actors - particularly brokers, appraisers, financial and market analysts and planners - helped move capital through the built environment, articulating arguments for its free passage, identifying inflexion points, and temporarily stabilizing meanings associated with individual buildings, submarkets, and periods. These professionals engaged in meaning-making work by adopting classificatory schema such as “Class A, B and C” and assigning values to make buildings into calculable and legible assets. I argue that their techniques for classifying property were neither representations of “real” qualities nor smokescreens for capital accumulation, but actively operated to make possible the stakes, dispositions and
values of their own professions. These techniques also shaped and formatted the markets they ostensibly described.

Although they worked in different sectors and through different media (affect, regulation, technical expertise), each of the professional groups I studied reinforced the others’ work though repeated transactions and dependence on the each other for the successful execution of their contractual commitments. For example, property values appreciated as a result of the recursive feedback of different professionals across the industry acting on comparable hunches at roughly the same time. Norm followers were rewarded by this “mimetic rationality” with higher commissions, tax revenues, and investment returns. Incentives to herd and collude reinforced mutually consistent narratives of when markets are cresting and waning. Their coordinated calculative behaviors attracted other members of the industry to and away from similar properties and submarkets at roughly the same time, performing cycles.

References


Abstract Index #: 593
UNEVEN ACCESSIBILITY: DWORKIN'S PERSPECTIVE
Abstract System ID#: 311
Individual Paper

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In Sovereign Virtue, Dworkin (2000) develops a theory of justice that puts competition over resources at its core. Dworkin proposes to use resources, rather than primary goods (Rawls 1971) or capabilities (Sen and Nussbaum), as the proper metric of fairness. He conceptualizes resources as the sum of material resources owned privately by individuals. A society is fair, according to Dworkin, if an equal amount of resources is devoted to each person’s life. In Dworkin’s approach, people insure themselves for bad luck. This includes disabilities, ill health, and lack of talents. Through insurance schemes, it is possible to determine whether people, if given equal resources, would be willing to set part of that resources aside to limit the bad luck which a person might encounter in life. This ‘willingness to insure’ is then seen as the indicator for the means that should be set aside in a real society through taxation, to assist people that befall this bad luck. In the paper, I will apply the Dworkian approach to the domain of transportation. I will do so through a set of abstract examples, in which people can insure themselves for lack of transportation opportunities that might befall them because of various situations. I will end with conclusions regarding fairness in the domain of transportation.

References

PLANNING AS ACTION: QUESTIONS OF BETTER REQUIRE BETTER ETHICAL QUESTIONS

Actions, including reasoned non-actions, are fundamental to planning. Planning without the associated implication, even obligation, to affect change in the world becomes hollow and meaningless. In John Friedmann’s words “Planning that changes nothing of substance is scarcely worth talking about.” (1987, p. 44).

Considerable insights have resulted from research which has sought to assess the benefits and failings of particular policy initiatives and to explain, inevitably retrospectively, why such decisions were made. But, by contrast, much less attention has been focused on what is actually involved in taking and implementing actions in the messy world of the here and now. Our purpose in this paper is to take the imperative to act as our starting point. We therefore seek to explore the theoretical and practical implications of placing action centre stage.

Key to our argument is the assumption that the practices of doing and acting have very different qualities to the practices of observing or analysing planning activities. We do not claim particular originality for taking action as our starting point, but we are concerned that what is involved in acting in real time has received relatively limited considered focus in the planning literature. The huge challenge that then presents itself is how to write about real time action, other than from the remote and privileged position of an ex post facto observer. The somewhat unusual, although not unique, quality of this paper is that it is jointly authored by an academic and a practitioner. The resulting paper therefore should be viewed as a conversation between the worlds of research and practice.

The paper explores action in planning, not as a phenomenon to be observed from the outside after the action has been taken, but to be considered from the inside at the point of acting. The argument first considers how to write about action before in the remaining three sections focusing on what rigour means in relation to action from the perspective of practice, then examines how far this differs from how action has been understood within the planning literature, and finally exploring the resulting lessons and implications for the theory and practice of planning.

The conclusions are necessarily tentative but suggest that action has very different qualities if it is considered from the perspective of doing, rather than being the subject of observation. Understanding planning as action (in real time), at the very least brings a new dimension to existing debates, and therefore has substantial implications for practice, theory, research and education.

References

Policy transfer, a longtime focus for political science researchers, is the conceptualization of how policies move between governments. (Khirhan et al, 2013; Clarke, 2012; McCann, 2011; Peck, 2011; McCann & Ward, 2010; Peck & Theodore, 2010). More recently, geographers have infused policy transfer literature with consideration of sites and locational dynamics spawning a new theory policy mobilities (McCann, 2011; Peck, 2011). Policy mobilities are the fast exchange of ideas between cities where policy entrepreneurs bring new approaches to innovation seeking cities (McCann, 2011). The purpose of this paper is to provide insight into policy mobilities and how innovations land in new contexts. Understanding policy mobilities is important in a neo-liberal and globalized context, where cities with limited resources, compete with each other for talent and investment.

Rather than providing off-the-shelf solutions, policy mobilities represent contingent assemblages of solutions, crafted for new contexts (McCann & Ward, 2012; McCann, 2011). Assemblage is a useful concept through which to consider material manifestations of policy mobilities. Urban assemblage considers the city as a multiple enactment which is simultaneously material (physical), actual (understood) and assembled as well as emergent, processual and the multiple” (Farias, 2010). The concept of assemblage allows for the simultaneity of experiences of spaces to shape meaning. Each newly introduced element, or action is placed or performed in and shaped by existing contexts and is contingent on various factors, including the participants and their individual perceptions. (McCann & Ward, 2012; Healy, 2011; McCann, 2011). Policies are inserted into new locations, are blocked, or mutate into new forms of hybridized innovation (McCann, 2011) which may reverberate beyond intended zones of impact, shifting development and community expectations (McCann & Ward, 2012). While current literature documents the occurrence of policy mobilities, research investigating how mobilities are received and mutate is lacking (McCann, 2011).

Vancouver’s extrospective stance advancing a brand of sustainable urbanism has made it recognized a center of policy innovation (Khirhan et al, 2013; McCann, 2013; McCann, 2011). West Dallas Dream (WDD) was a 2009 urban planning visioning exercise utilizing transactive and communicative planning methods. It was delivered by former Vancouver Co-director of Planning, Larry Beasley and aimed to “do Dallas planning differently” (Brown, personal communication, 2014). Breaking from a history of top-down planning methodologies (Graff, 2008), WDD sought to empower citizens of this poor inner-city Dallas neighborhood, while developing a vision to catalyze and shape new development (Brown, personal communication, 2014).

Through the frame of policy assemblage, utilizing a single-case study methodology, this paper considers the perceptions of the physical material assemblage of new spaces advanced through WDD. To understand how the community interprets the changes resulting from WDD, interviews will be conducted with WDD process participants and with randomized citizens at key sites in West Dallas. The intention is to better understand how material manifestations of policies propagated for use in one context are perceived and interpreted in a very different context. This study will increase our understanding of policy mobilities as a concept describing the movement of policies from one context to another.

References
The rational planning model has been challenged empirically and logically, but most planners still hold some version of it. A central attraction of the model is that it assumes away the reality that people think and act emotionally, often unconsciously. It simplifies planning by portraying people as rational actors, hence understandable, predictable, and manageable, and it reassures planners that they themselves are rational analysts, hence not subject to bias or loss of perspective or control.

The paper analyzes planners’ attraction to the rational model by exploring planners’ beliefs about the mind. The first section examines three planning assumptions about rationality: (1) that planners should understand conditions by analyzing copious information logically, systematically, and without interest or bias; (2) that human beings are innately motivated to act strategically and efficiently to achieve material ends; and (3) that planners can collect and analyze information about human conditions logically and systematically, without thinking emotionally and irrationally.

The second section examines the meaning of “emotion” that is excluded by planning rationality. Although conventional language of “emotion” implies that it is an external substance that prevents its victims from thinking rationally, it is more accurate to say that “emotionally” is a particular way that persons with conscious or, often, unconscious intentions choose to act. Persons think or act “emotionally” with regard to how they assess relations with others. For example, people regard those who please or care for them lovingly and those who displease or harm them angrily. Such reactions to others strongly influence people’s thinking and actions.

The third section of the paper describes the increasing attention that academic fields and professions other than planning have given to emotion. Sociology, geography, and economics have scholars who study “emotions” with an interest in how reactions to relationships influence individual and aggregate behavior. The legal and health professions have subgroups interested in how emotional thinking and action have contributed to problems, influenced professional decision making, and should be taken into account in addressing problems.

The fourth section describes the limited attention planning has given emotion. A few studies of individual planners have examined emotional thinking as a contributor to planners’ difficulties’ rationally analyzing issues and as a resource for understanding and addressing problems where purely rational approaches are inadequate. A few studies of communities have shown how individuals’ attachments to communities matter to their identity and how community identities influence people’s thinking and action, sometimes in conflict with realistic planning requirements. These studies show that, although the rational model assumes away emotion, emotion influences planning.

The fifth section offers explanations for why planners ignore emotion: (1) planners based claims for professional status on having specialized rational skills; (2) people who want to avoid emotional activity are attracted to planning because of its rational professional image; and (3) groups and institutions concerned about social order value planning because its suppression of the recognition and expression of emotional activity supports order. For these reasons planning is likely to continue to ignore emotional activity.

References
Public- and private-sector decision makers in the built environment confront dynamics failure—the consequence of decisions that are interdependent, irreversible, indivisible, and made with imperfect foresight (Hopkins 2001). So too do improvisational comedians. Improvisational comedy is a form of live theater in which autonomous players collaborate to create full and coherent story lines—including meaningful characters, objectives, relationships, and environments—with neither a script nor a central creative authority. While such a scenario is vulnerable to gridlock and incoherence, trained improvisers employ three practices that help them cope with such uncertainty on stage: (1) they accept each other’s ideas (known as “gifts”) and offer new “gifts” in return—a strategy known colloquially as saying “Yes, &”; (2) they “play games” that structure action and dialogue; and (3) they build “group mind” by performing repeatedly with familiar players (see Besser, Roberts, and Walsh 2013; Halpern, Close, and Johnson 1994).

Drawing from a set of planning cases, which we re-format into improvisational dialogue, we illustrate how private and public actors in urban regions, making separate decisions, cope with the “four I’s” in much the same way as improvisers: (1) they make plans and use each other’s plans (saying Yes, &); (2) they subscribe to pre-existing decision-making structures (playing games), and (3) they form coalitions of actors with no a priori reason to cooperate (building group mind). Improvisational theater is not completely foreign to research in the planning discipline (e.g. Inam 2010; O’Leary, Bingham, and Choi 2010). These applications, however, focus on the benefits of improvisation while navigating unpredictable social environments with the objective of reaching a single consensus decision before taking action. While we do not debate these claims and agree that these benefits deserve further exploration, this paper argues that improv is also a useful analogy for how plans work (and ought to work) as communication among public and private organizations that are also taking separate actions rather than trying to reach consensus before acting. Our argument is not that plans are the only means of such communication, but that this use and function of plans is important to making sense of what plans can do as coordination without enforcement.

The improvisational vignettes aspire to show, also, that individuals and organizations sometimes use plans not as if they were predetermined outcomes to be implemented—as if they were a script in a theatrical performance—but rather use plans as signals of intentions and possibilities that shape and justify new decisions and new plans as new information and new circumstances emerge over time (Hopkins 2014; Boyer 2014). We use these vignettes to illustrate that narratives that emphasize time, coalitions, and plans can help planners make valuable plans, and help actors in an urban environment use plans in valuable ways.

References
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This research investigates how economic expertise influences development planning and administration through a case study of results-based development at a recently established US aid agency. It aims to make a theoretical contribution by taking a science and technology studies (STS) approach to address the asymmetrical treatment of experts in the planning and development literature. When experts fail, politics has triumphed over rationality. When experts succeed, the credit goes to rationality, not politics. By turning the focus to economists’ styles of reasoning and planning tools, this dissertation treats experts’ success as having political effects of its own. Doing so allows us to treat economist-led, results-based development not as a process of depoliticization, of technical solutions prevailing over political interests and values, but as an explicitly political project that can format power relations and reshape the planning and implementation process. This focus on what economists do also has implications for planning practice because it opens up new avenues for potential reform. Rather than addressing the ‘democratic-deficit’ in global development through participatory processes alone, we can pursue democracy by ‘getting inside’ the techniques.

The paper takes as its case a results-based development model at the US Millennium Challenge Corporation (MCC). The MCC was established in 2003 as a response to the Monterrey Consensus on Development Finance that called for a focus on donor-recipient partnership, poverty reduction, and a focus on results. Using an embedded design, two particular techniques important to MCC’s operations that have achieved wide popularity over the past decade – growth diagnostics and randomized controlled trials – are each separately examined as part of the broader case. The technique discussed here is that of growth diagnostics and its influence on MCC’s bureaucratic relations and development plans. Unlike the more uniform policy prescriptions of the Washington Consensus era, diagnostics are designed to help improve development effectiveness by finding the right ‘recipe’ for growth given a particular national context.

Secondary data from government documents and primary data from interviews with professionals in the US global development community support the paper’s findings. Potential implications for planning theory and development practice will be briefly explored.

References
The recent flurry of books on just cities (Fainstein 2010) or spatial justice (Soja 2010) suggests that planners create better places by implementing a certain concepts of justice. Traditionally, this view has been challenged by urban economists, who stipulated more jobs be created by introducing more efficient modes of production (which often meant merely cost-saving, capital-enhancing modes). However, the idea of spatial justice must be questioned from an entirely different perspective, too. What if a plan conforms with a socially preferred standard of justice, but is humiliating to one or several persons whose destiny is affected by this plan?

A taunting illustration of the tensions between spatial justice and human dignity are poor-door-developments. Responding to the housing needs of poor persons, several Western cities with rapidly growing land markets (e.g., London, New York City) have coerced real estate developers to set aside floor space quotas for less affluent tenants. This demand has been based on a vigorous interpretation of social justice: Land prices and land rents must not exclude poor persons from access to affordable housing in urban neighborhoods. As a response to this demand, however, the developers have come up with a peculiar design concept: The high-end portions of the new buildings only can be reached through a “posh door”. Access to the high-end sections of the new buildings depends on paying high service fees for 24/7 security, brightly lit corridors, generously spaced common areas, wellness spas, aroma and sound management, or other amenities. Tenants, who cannot afford to pay such service fees, may reach their apartments through back-doors which have been dubbed by an unfriendly press as “poor doors” (http://www.theguardian.com/society/2014/jul/25/poor-doors-segregation-london-flats). But is the consideration for a tenant’s ability to afford high service fees not also a credit to social justice? After all, land markets would prevent poor persons from affording an apartment in the most desirable quarters of affluent cities like London or Manhattan. Only the administration of a vigorous pro-poor land policy helps establish spatial justice. The promotion of social justice, however, can result in a humiliation if the “beneficiaries” of the pro-poor policy feel degraded by the poor-door-design.

Cities always have been a place for very wealthy, moderately wealthy, middle-income, poor, and extremely poor persons. T.H. Marshall’s (1950) concept of social citizenship, in fact, is based on the idea of a spatial segregation accompanying social stratification – provided that every person receives her or his modicum. Surely, the existence of cities as such has never been questioned as being a humiliation or degradation. Rather in the opposite, cities have been considered as places of opportunity and freedom from restrictions that village populations had to suffer as a consequence of the strict and scarcely distributed rural spaces.

The paper explores the surprising relationship between discourses on justice (open to general debate and contention) and discourses on human dignity (limited to each and every person’s intimate sense of self-respect). The first clash that occurs, obviously, concerns the format of such discourses. Justice discourses invite contradictions and contestations, dignity discourses beg for respect and decency. Already at this stage, planners must hate dignity discourses. Moreover, dignity discourses give voice to everyone who has already lost in the justice discourse. For planners, this means that everybody whose case has been turned down during public participation or even courtroom trials, will come back and claim to have been victimized by a humiliating planning practice. Planners can hardly ignore the call for human dignity. After all, virtually all international human rights treaties draw from the unwaveringly concept of human dignity, and more than 130 constitutions worldwide contain explicit dignity clauses. Yet, is human dignity a better standard for planning than spatial justice (Margalit 1996)?

References
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In response to the challenge of overcoming excessive centralisation of the energy system, there has been a recent wave of experimentation with urban energy initiatives at the local level. The paper reflects on the use of key concepts from Actor-Network Theory and associated assemblage theorising to explore such experimentation. It analyses thirteen case studies of urban energy initiatives, nine in the UK but four from USA, Germany, the Netherlands and Sweden. Based on a critique of the perspective on the local energy project provided by the Multi-Level Perspective, it uses assemblage thinking to explore the forces stabilising and destabilising such projects and to consider how the radical symmetry of ANT between the material and social makes a difference. This suggests that four sets of relationships play a particularly important role: relationships with the local environment, those structured by economic models and artefacts, the social capital of social networks and prevailing values. It further considers how an assemblage may move beyond being anchored in the locality to become a mobilised project capable of spreading experimentation. Finally the paper reflects on the contribution of ANT and assemblage theorising for such an analysis and for understanding urban experimentation more broadly.

The paper draws on the research undertaken with the CLUES (Challenging Lock-in through Urban Energy Systems) project, funded by the UK EPSRC under Grant EP/1002170/1. The contribution of colleagues within this project is gratefully acknowledged.

References

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Urban development can often seem an irresistible force. The imperatives of new projects and profits seem deeply inscribed in the DNA of liberal capitalist societies. The state may seek to mediate, ameliorate or shape this force, establishing a claim to a greater public interest in certain forms of development. As it does so, the force grows even more irresistible and space for political challenge is closed down. Yet, such irresistible force often summons seemingly immovable subjects of resistance: citizens and campaign groups who stand steadfast against planned
change and declare that they will not be moved. The immovable subjects of resistance may be mobilized by
diverse concerns: from perceived threats to valued place attachments or a sense of environmental injustice,
through to more ideological motivations, whether in defense of private property rights or as a challenge to them.
These contradictory impulses may even be combined in sometimes surprising ways against the irresistible forces
of development (Frick, 2013).

Contemporary planning theory struggles to make sense of the ambiguous political challenges posed by the
subject of opposition. Dominant theoretical accounts of consensus and conflict highlight the problem. If
opponents are often immovable, movement is precisely what those who would promote mediation, agreement,
accommodation (or even compromise) require. Yet little attention has been paid to the shifting of subject
positions involved, the requirement to cultivate new individual and collective identities. Others argue that moves
towards agreement undermine the political energies and identities that drive opposition. However, the
alternative seems to leave little space for anything but a digging of trenches, preparation for conflict that
forecloses the possibility of any collective learning.

This roundtable starts from the view that, amidst promising theoretical and practical attempts to reconcile
conflict and consensus (recent contributions include Porter and Barry, 2014; Legacy, Mouat and March, 2014;
Frick, 2013; Bond, 2011; and Forester, for example), inadequate attention has been paid to the immovable
subjects that challenge the irresistible forces of development. We therefore seek to explore how planning theory
and practice can learn from new ways of engaging with the subject of opposition: how is the political subject
expected to inhabit, engage, and resist in democratic process? How should such opposition be understood in
relation to wider civic cultures and the ties of collective membership and mutual obligation that they cultivate?
What contributions do these forms of citizenship make to the shaping of urban life and to social learning about
how we can promote more sustainable forms of coexistence?

This roundtable will explore how experiences from a variety of international contexts might begin to answer
these and related questions, opening new directions for understanding and activating the contemporary politics
of urban planning and development in strategic and everyday ways.

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engagement in highly-regulated planning systems: norm development within fixed rules." Planning
- Porter, Libby, and Janice Barry. 2014. "Bounded recognition: urban planning and the textual mediation
In this panel, we investigate the contours of a humanist planning, exploring its current role in planning theory, research, and practice. Humanism encompasses a broad array of philosophical positions based around the primacy of human nature and agency (Plummer 2004). In this roundtable, our look at humanism foregrounds an overarching focus on human welfare and on the full development of human capacities. We ask what planning centered around human experiences, needs, and desires looks or should look like.

The field of planning has consistently negotiated a tension between the requirements of urbanization and humanistic concerns. The priority of these concerns, however, and the methods by which knowledge of them is constructed and integrated into planning practice have evolved and remain contested. Critics have questioned whether planning has ever been humanistic and have faulted it for being unduly bound to the forces of bureaucracy and the market, losing track of the essential questions: “What are we planning for? What are the values of our planning?” (Fromm 1972, 68).

How might planning better heed the humanist call? Epistemologically, this query looks beyond equitable deliberations into "planning for whom?" and poses the anterior question of "how do we know?" Methodologically, it asks how planning can and should respond to the fullness of human experience. Ultimately, we would like to consider whether and how a humanist orientation might offer planning the means to better accommodate and cultivate social transformation.

Moderators:
Ryan M. Good, Rutgers University
Juan J. Rivero, Rutgers University
Andrew Zitcer, Drexel University

References

Contemporary planning practice involves a wide range of knowledge, increasingly contained within computer models and other digital tools such as GIS databases, transportation models, and other planning support systems. These tools pose a theoretical problem for the field. On the one hand, they are thought necessary to produce high quality plans, given their ability to introduce knowledge and test alternative proposals. On the other hand, the tools present a challenge for democratic accountability, since they are created by experts and therefore may not reflect local perspectives. Existing professional approaches to this problem, such as joint fact-finding (Ehrrmann and Stinson, 1999) or mediated modeling, have not proposed theories which can apply broadly to professional practice. Furthermore, unlike other aspects of planning practice, normative theory of this issue is underdeveloped in the collaborative planning literature.
This paper develops one theoretical approach to this dilemma which builds on the ideas of John Dewey (1985 [1927]) and scholars of expertise in the field of science, technology, and society (STS). Theorists have proposed three approaches to the problem of expertise in democracy: a defense of some form of technocracy, an argument for dissolving the distinction between experts and non-experts (e.g., Fischer, 2000; Tironi, 2013), and a proposal for a critical interaction between experts and non-experts (e.g., Dewey 1985 [1927], Futrell, 2003). Building on the last approach, the paper develops John Dewey’s concept of a tool of inquiry, which is an artifact used by a democratic public for investigation that results in greater collective intelligence. Dewey proposes such tools can be held democratically accountable through connected and continuous critical interaction between expert tool-makers and the public, where tools of inquiry are shaped and tested. After Futrell (2003) and other STS scholars, the critical interaction should extend to both the division of labor between experts and non-experts, as well as the definitions, norms, and assumptions reflected in the knowledge.

The paper then conducts a preliminary application of these ideas to planning, and discusses how it might be used to guide future research. Projects differ in whether or not tools are used in critical interaction with a public for inquiry, and whether or not the critical interaction extends to tool shaping and testing. These two variables produce four project types. Each of the types is illustrated with projects described in the literature. Although conceptualized in diverse ways, this general framework seemingly explains variation in reported measures of project success. In particular, projects where tools are not used by a public engaged in inquiry, and where the tool is not shaped and tested, result in less evidence of group intelligence. The paper closes by discussing how the theory might be further operationalized and tested. In addition, the paper identifies several areas in need of further theoretical development: social perspectives on expertise, strategic use of artifacts, and the formation of democratic publics.

References


Abstract Index #: 604

LEARNING FROM GROUNDWATER: PRAGMATIC COMPROMISE PLANNING COMMON GOODS

Abstract System ID#: 501

Individual Paper

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Planners often struggle with the ethical ambiguity of compromise in the preparation of development plans. The plans they make face the resistance and criticism of powerful economic and political interests competing for status, resources and authority. What help can planning scholarship offer to practitioners seeking reassurance and guidance for their efforts to make plans serving a public good? In this essay, we take a pragmatic approach that avoids the effort to secure a theoretical foundation for moral judgment; and looks instead to the practical arts of seeking common ground. Instead of pursuing ideal rules or principles to guide judgment, we argue that practitioners should look to the ways in which people make plans to bridge the political challenge between economic competition and social cooperation.
We use a pragmatist approach in this essay to cast the strong distinctions between public, common and private goods as differences in degree whose ethical relevance for professional planning practice depends on how practitioners conceive relevance, context and use. Instead of exhorting practitioners to be just or accomplish optimal good, we would do better exploring how different plan-makers conceive and reconcile many ethical beliefs and ideals as they make and persuade others to follow their spatial plans. Professionals can and should learn the laws, rules, customs and methods that describe the range of norms and principles relevant for the discipline. But the pragmatist believes that meaningful ethical judgment requires paying attention to what plan-makers do in the context of a complex situation where moral, social and political differences shape the problems that emerge. We can learn from detailed narrative accounts of plan making and perusal if they provide enough relevant detail to reconstruct the context for judgment at the center of attention.

The paper begins by describing the pragmatic approach to issues of moral judgment in the conception and making of spatial plans. The next section explains the importance of social learning and collaborative planning work for ideas about public interest and public goods. The following section highlights the importance of identifying interdependencies and seeking compromises for making better and effective plans. The final section interprets three very different episodes of groundwater planning in Northwestern India as instances of long term pragmatic compromise. Compromise is not inherently bad even if it may yield bad outcomes. Pragmatism embraces plan compromise as a way to reconcile differences enough to coordinate a common good and still endure mutual antagonism.

References

Abstract Index #: 605
CITY-STORIES: NARRATIVE AS DIAGNOSTIC AND STRATEGIC RESOURCE IN CIUDAD DEL ESTE, PARAGUAY
Abstract System ID#: 517
Pre-organized Session: Storytelling and Planning

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Since the ‘argumentative turn’ in planning (Fischer & Forester, 1993), an increasing number of planning theorists have considered the role of discursive practices like narrative and storytelling. Planning theorists working in the tradition of communicative rationality have promoted ‘planning as persuasive storytelling,’ focusing on the narrative actions of planners as they aim to build a shared vision of city futures (Hoch, 1994; Throgmorton, 1996, 2003). Planning scholars have also considered how storytelling can be interpreted as ‘critique and/or explanation,’ a means to analyze general processes of urban change (Sandercock, 2003). From this perspective, conflicting narratives told by the different groups involved in planning interventions can be a productive means to analyze power dynamics (Flyvbjerg & Richardson, 2002). Similarly, feminists argue that all knowledge is embodied, partial, and situated (Haraway, 1988), as such, the stories of the marginalized and dispossessed are also crucial perspectives through which to analyze the workings of power in the city, both in the Global North and South (Roy, 2009; Watson, 2009).

My research investigates how planning and governance practice actually works in troublesome zones understood as unplanned or ungoverned. In this paper, I present ethnographic research on Ciudad del Este, Paraguay, where non-compliance with trade and use-of-space laws is widespread. Ciudad del Este hosts “the largest illicit economy in the Western hemisphere” (Brown, 2009). Thus, I ask: how does planning practice work in spaces characterized by widespread law-breaking by elites, the urban poor, and state actors alike? In contrast to the commonly held
assessment that Ciudad del Este, Paraguay is lawless and unplanned, I show how planners promote elite-led and exclusionary urban transformation via the strategic deployment of narratives of the unplanned city, what I call “city-stories.” With the concept city-stories, I highlight how the spatial fabric of a city comes into being through a discursive, meaning-making register narrating what the city is, should be, and for whom. City-stories are also a terrain of contestation. I analyze the city-stories of precarious street vendors as a diagnostic of power, as embodied perspectives on everyday practices of regulation that can clarify how local state actors actively foster spatial disorder and legal uncertainty as part of planning practice.


References

Abstract Index #: 606

IS THERE A CRISIS OF PARTICIPATORY PLANNING?

Monno and Khakke (2012) recently declared a “crisis of participatory planning” suggesting that urban politics has transitioned into a post-political context rendering citizen participation in urban change processes void of substance and influence. A recent contribution by Purcell (2013) provokes thinking about the relationship between participation in planning and what it means to be a citizen that lives within and actively engages in an
urban democracy. The critical literature on participation and of deliberative democracy more generally warn that a focus on “consensus politics” evades the political in planning preventing citizens from confronting and challenging public discourse and prevailing planning orthodoxy about the way the urban is constituted and re-created, for whom and by who. Instead, the formal processes of city planning set out clearly defined sites for citizen engagement to occur (e.g. city visioning processes early in the strategic planning process) that may limit broader expressions of engaged citizenship, particularly at the stages of implementation. Yet, despite a democratisation of planning through excessive emphasis upon these formal and rather narrow spaces of participation, engaged citizens continue to punctuate planning through informal, collective, grassroots action or through focused, sometimes site specific oppositional campaigns, shaping the urban environment and urban political landscapes. Between the political landscapes and the post-political neoliberal context, a binary is established (Bylund, 2012).

Raising questions on what it means to be an engaged urban citizen within the political/post-political binary, this paper critically engages with the view that there exists a “crisis of participatory planning”. The paper will argue that at the intersection of the political/post-political binary a re-democratisation of cities is challenging traditional conceptualisations of what it means to be an engaged citizen. The paper will draw upon the delivery of contentious infrastructure projects in Toronto, Melbourne and Sydney to explore the ways in which citizens are reinvigorating participatory practice, offering insights into the role and potential for urban political contestation.

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MOBILIZING BOGOTÁ: STORIES FROM ELSEWHERE AS URBAN GOVERNANCE TOOLS
Abstract Index #: 607

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In recent decades, the speed and geographical extent at which policy and planning ideas are circulating has increased significantly thanks to communication technologies and a new generation of traveling and increasingly interconnected planning experts, policy-makers, NGO representatives and urban activists (Healey 2013; McCann & Ward 2011). International policy models or “best practices” are either celebrated as inspirational examples that can spur policy change and learning in other places or critiqued as “one-size-fits-all” models that do not consider the complexity of local contexts. Less is known, however, about the role of models and “best practices” as urban governance tools. One city that has recently entered into the selective global repertoire of urban policy models is Bogotá, the capital of Colombia. Traditionally portrayed as an urban dystopia in the early 1990s, Bogotá became a world policy model of sustainable urban transport in less than a decade. Since 2001, cities as diverse as Jakarta, Guangzhou or Los Angeles among more than one hundred others, have implemented a Bus Rapid Transit (BRT) system drawing inspiration from Bogotá’s Transmilenio BRT. In the same time period, mayors, transportation planners and bike advocates in more than 120 cities have referenced Ciclovía, a 70-mile weekly car-free event in Bogotá, to pass local street closure program in their home cities, both in the global North and the South. Using qualitative and ethnographic methods, this paper examines the case of Guadalajara, Mexico’s second largest city, where two non-state organizations helped introduced a new policy issue - sustainable urban mobility- in the local and state government agenda in the mid 2000s making extensive use of references to Bogotá, Colombia. Storytelling and study tours are identified as key learning practices through which Bogotá’s policies were mobilized in Guadalajara. While this could be seen as an exercise of South-South urban policy learning, an example of a Latin American city, Guadalajara, which learned innovative urban planning mechanisms from another Southern peer, in this paper, I’m more interested in showing how practices of inter-city policy learning take place in a field of urban politics and governance. From this angle, the circulation of Bogotá stories
could be analyzed as a political resource and urban governance tool that helped two non-state organizations - GDL 2020 and CEJ- introduce a policy issue in Guadalajara’s local public agenda.

References


Abstract Index #: 608

THE ROLE OF PLANNING RESEARCH IN TIMES OF ECONOMIC CRISIS

Abstract System ID#: 546

Individual Paper

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The onset of the global financial crisis in 2008 deeply effected cities and the people that live in them. In many countries in the Western World, housing bubbles burst, unemployment rose precipitously, and personal and corporate bankruptcies increased. The financial crisis also sharpened debates about the rise of income inequality, concentrated poverty, the decline of the middle class, and the role of government in stimulating economic growth by providing high quality public services. Indeed, these debates burst into the public consciousness, as new social movements such as Occupy Wall Street and Idle No More coalesced to mobilize for change.

Amidst the start of an economic crisis that had significant urban antecedents and implications, it could be expected that planning scholars would be front and center in producing research to understand the causes, impacts, and responses to the crisis. Yet to date, it is not altogether clear whether the academic planning discipline, especially as distinct from the broader field of urban studies or urban geography, has taken up the challenge of developing a scholarly focus that is sensitive to the issues raised by the economic crisis, or the way that it has impacted on the practice of planning.

Against this backdrop, the purpose of this paper is to examine whether the focus of published research in planning has shifted in discernable ways to cover topics made pertinent by the economic crisis? In order to carry out this analysis, the paper will report on the findings of a content analysis of articles published in the 10 top ranked peer reviewed scholarly journals in planning, geography, urban studies and economics over the past decade. This analysis identifies the extent to which the global financial crisis has become a major theme in urban planning research, whether the common topics of published research have shifted since 2008 to respond to key planning issues raised by the economic crisis, and the ways in which planning scholarship on the economic crisis compares with other social science disciplines.

Through this analysis, I reflect on the relevance of planning research in the face of a global crisis that is reshaping cities and the urban policy landscape. This research is intended to inform a broader discussion that is currently taking place in the planning discourse about the role and societal significance of scholarly research in the field (Siemiatycki, 2012; Campbell, 2012, Flyvbjerg, 2012). It has long been recognized that a primary goal for planning scholarship is to acquire knowledge with the goal of informing action (Friedmann, 1987), and many scholars report that one of their personal objectives is to carry out research that matters and makes a difference in the world. This paper makes a contribution to discussions about the relevance of planning scholarship by exploring how research in the discipline has responded to a contemporary crisis that has captivated public attention, and is having a critical impact on planning practitioners and society as a whole.

References


Abstract Index #: 609
SELLING STORIES: ENTREPRENEURIAL NARRATIVES OF SOCIAL ENTREPRENEURIALISM
Abstract System ID#: 547
Pre-organized Session: Storytelling and Planning

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Planners tell stories to create plausible realities, enroll diverse perspectives, mediate among competing interests, and persuade protagonists to coalesce around preferred courses of action. Planners also sell stories, acting entrepreneurially to capture and expand market share for policies and practices in which they have a personal or professional investment. This paper traces the narrative produced by a small but dense network of policy entrepreneurs seeking to expand the reach of social entrepreneurialism within the urban social policy arena in the first decades of the twenty-first century. By social entrepreneurialism, I refer to the practices of social enterprise investing, social impact finance, social impact bonds, and related initiatives that are gaining increasing traction as mechanisms for mobilizing private capital to address urban social problems. Since adoption of the first Social Impact Bond (SIB) in the UK in 2010, a highly active cadre of self-styled “thought leaders” in government, philanthropic foundations, nonprofits, and the private sector has worked in close conjunction to sell the idea of social impact finance to and within the U.S. urban policy marketplace. This entrepreneurial activity proceeds through construction and dissemination of a singular narrative employing the repetition of selected tropes (programs are “data driven,” “evidence based,” “cost effective”) valorized through mutual citation across multiple media and transported by key individuals moving across academic, government, corporate, philanthropic, and nonprofit sectors. Through successive cycles of mutual citation, the narrative of social enterprise transcends the policy practice it purports to represent and instead becomes its own reality, texts referring to texts to define the product, create a market, and make the sale.

References

Abstract Index #: 610
GOVERNING THE UNGOVERNABLE? MEDIATING CULTURES OF OPPOSITION TO PLANNING AND DEVELOPMENT
Abstract System ID#: 643
Individual Paper

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If urban development has long generated conflict, oppositional mobilisation has arguably become more pronounced in many jurisdictions in recent years. Conservative opposition to new development presents particular challenges for contemporary planning theory and practice since planners and planning processes are typically tasked with managing the political energies generated whilst ensuring the future provision of key public goods. One strand of communicative planning theory has been concerned to explore how planners might act as mediators of conflict, shaping opportunities for reasoned debate that can lead to agreement. Well-rehearsed critiques have, however, pointed to the potential for formally deliberative practices to function coercively, masking the powerful mediating effects of wider social structures (ideologies, discourses and rationalities) and displacing political energies that threaten to disrupt the search for agreement.

This paper contributes to understanding of how the political energies generated by seemingly intractable conflict over urban development are currently mediated by planning processes. It does so by exploring the example of planning for new housebuilding in England, an issue presented as a serious political and public policy problem in recent years. Constructed in governmental discourse as a key contributor to a ‘housing crisis’, high levels of opposition have been blamed for preventing and slowing down legitimate development that is required to meet housing needs. In response, whilst retaining a strong rhetorical commitment to the promises of collaborative governance, successive administrations have experimented with mechanisms for governing this problematic issue by managing the conduct of local actors (citizens, planners, politicians) from a distance.

By way of illustration, the paper draws on empirical material collected as part of an ex-ante evaluation of a recent government proposal to mediate conflict by offering financial incentives to influence the attitudes and behaviour of citizens who oppose new housing development. In Foucauldian terms we explore, 1. the distinctive ways in which this initiative constructed the problem of opposition, 2. the rationalities or mentalities that shaped this attempt to govern the problem, and 3. the particular subject-positions that these would generate for local actors.

We then go on to examine how those actors understood the likely effects of this putative governmental rationality on political struggles over new housing development.

Our analysis suggests that, by constructing opposition as a problem of rational self-interested economic action, the neoliberal rationality underpinning this initiative misrecognises the complex range of often deeply felt concerns and attachments that actually motivates opposition. As a result responses from professionals and citizens suggested the proposal would be unlikely to substantially affect levels of opposition. Somewhat ironically, actors in local government also highlighted the potentially disruptive effects of introducing a system of incentives, suggesting that locally generated collaborative ‘fixes’ had emerged in many locations that were capable of effectively ‘managing’ the problem of opposition.

Overall, we argue that planning theory should develop a richer understanding of the multiple and complex ways in which planning disputes are mediated, both locally and at a distance. However, we also suggest that neither of these means of dealing with the problem of opposition seems capable of doing justice to the political energies that are generated. As a result local planning processes rely on a repertoire of defensive techniques that deflect the wider political challenges presented by opposition. This means more research is required to understand the range of effects generated by limited attempts to mediate opposition, particularly how the displacement of political energies affects the local state and citizens who oppose. Ultimately, planning theory must consider how broad societal cultures of opposition to development might be mediated.

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Planning theory and practice continually evolve with society and the world. Planning scholars contribute to the evolution of the field through their research and reflections. For example, advances in planning theory have come from studies of practice (Boelens 2010) and from comparisons of the dominant perspective – North West (developed) countries versus South East (developing) countries (Watson 2012). In that spirit, this paper will apply the lens of rural planning scholarship, which contrasts to the pervasive urban perspective in the profession, to gain insights for both theory and practice. The paper is empirically based upon a set of ten interviews of leading rural specialists in North America, a group of five commentaries by planning scholars addressing “why rural planning matters,” and the research-based literature.

Scholars have noted that over the past several decades procedural concerns such as communicative planning have come to dominate the planning theory discussion. There is an argument for an expansion of the concerns of planning theory to cover the spectrum of who, what, when, where, how, and why (Dobrucká 2014). Calls for more substantive and normative planning theory have come from scholars concerned with the tangible problems resulting from moral relativism, and scholars focused on specific issues of justice, the expanding scope of the objects of planning (such as complex social-ecological systems), and the need to better reflect “reality” (e.g., Harrison 2014). The rural lens emphasizes substantive planning theory due to the object of study, which in this case is the “where”.

Rural areas in North America are generally viewed in the materialist sense, as having low population densities and strong connections to natural resource production, and environmental amenities and ecosystem services (Bell 2007). Rurality can also have idealist aspects, i.e., rural culture and values, which can transcend specific places and times of the materialist rural (Ibid). Scholars and practitioners are increasingly paying attention to rural places, the culture of rurality, and a rural lens, due to concerns of sustainability and integrative planning approaches. The rural lens promises to provide insights not only for rural places and rural planning, but also for planning more generally, including ideas for cities (e.g., multifunctionalism and urban villages), and new understandings of actors and systems from individual/site to regional to global scales.

This paper will analyze the literature to elucidate the status of substantive planning theory and its connection to the types of places as objects of scholarship and practice. The paper will also review the literature to show how studying rural areas, rural planning, and possibly rural ideals, have in the past contributed new ideas for planning. The paper will then apply the primary data gathered – the rural specialist interviews and planning scholar commentaries – to identify the implications for planning theory and practice derived from taking the rural lens, and how these innovations relate to and reinforce general planning trends.

References

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Planning researchers craft stories in a variety of genres, from the academic article to the letter of recommendation, from the syllabus to the commissioned report and plan. The existence and conventions of genre are not accidental, as society codifies the forms that correspond to its ideology (Todorov 1976, 164). Each genre boasts an audience with specific demands. Call it planning as persuaded storytelling, to twist a well-known phrase (Throgmorton 2003). For planners’ stories to serve as both a means of expression and a tool designed to shape futures (Cameron 2012, 576), the storyteller must achieve competence and comfort in the exigencies of genre.

This paper draws from the author’s experience writing up the same data in two different genres. In 2013-2014, a group of researchers explored arts access and participation in several neighborhoods in West Philadelphia. These neighborhoods have been traditionally underserved by arts funding, though their cultural life is robust. Gentrification pressure from nearby anchor institutions has created additional urgency around bolstering the existing cultural infrastructure. The author presented the data in a funder-commissioned report, as well as in an academic journal article. Neither genre exercise adequately captured the communities’ lived experience; the report and the journal article each bore constraints that called forth certain kinds of statements, certain kinds of conclusions. Reports, often written to be accessible and designed to influence policy, demand their authors to be declarative, prescriptive and commanding. Academic writing is perhaps more varied in tone, yet possess a more ambiguous link to audience and policy consequence.

In order to comprehend why planners write the way we do, it is necessary to revisit and problematize the expectations of audience and genre. We must interrogate questions of power, voice and authority in planner’s stories (Lake and Zitcer 2012). We must determine the ways we are served by genre, and when contemporary forms of storytelling fall short. If the goal of social science is to thoughtfully alter the dimensions of collective life (Geertz 2000, 34), then perhaps the way forward calls us to transcend genre, writing new sorts of stories, morally grounded and inventive.

References
The central aim of this research is to evaluate two directly related, and still highly controversial large scale urban (re)development projects – the Cheong-gye-cheong Restoration Project (CRP) and the Dongnam Distribution Complex Project (DDCP) – from a justice perspective with a primary focus on issues for merchants. The main research question that tries to answer throughout this thesis is: if planning should pursue the public interest but often unavoidably harm minority’s interests, how can planning be more just in relation to them?

Cheong-gye-cheong (CGC) is a 5.8km length historical river passing through the Seoul city centre, which was covered up in the 1960s and 70s. Restoration of this historical river was acknowledged as good for the general population. Simultaneously, however, there was one of the largest convention markets in Korea, and the restoration meant significant losses for many merchants without compensation. Severe conflicts occurred, and as a result of negotiations, a relocation market was agreed to be provided to the merchants with special privileges as a de facto compensation. This was why the DDCP was taken place. Yet, despite ostensibly ‘just’ processes of both the CRP and the DDCP, the outcome of the DDCP turned out to be a failure. A large number of merchants could / did not move into the market when it was completed, and most CGC merchants have experienced significant losses. The failure of the DDCP also left a considerable debt to taxpayers. These two projects are still highly controversial, particularly in terms of justness. The evaluation of the justness of the project requires a thorough investigation of the projects focusing on: why the seemingly undesirable outcome in relation to merchants was generated; how we can evaluate from a justice perspective; and how the projects could have been better and more just.

In order to do so, reviewing theories of justice and justice in planning is preceded. Michael Sandel and Heather Campbell’s accounts are particularly influential in this process. Throughout the review, it is argued that justice is inescapably judgemental and can only be reasoned through a politics of the common good. Yet, due to the dark sides of the concepts of community and common good, this thesis proposes that both concepts are needed to be reconceptualised, and judgements should be guided by universal values and practical principles. Influenced by Campbell, this thesis argues that justice in planning is about situated ethical judgement through a politics of the common good guided by universal values and practical principles. Subsequently, the applicability of the concept of justice in planning in planning practices is explored.

Based on this conceptual framework of justice in planning, the processes and outcomes of the two consecutive projects are scrutinised, focusing specifically on why merchants did not or could not move into the relocation market in the end. The investigation shows that although the processes of both projects were seemingly democratic, they were actually not, and as a result, there were misrecognitions about merchants’ economic circumstances, exclusions, misinformation, and non-decision makings. It is also shown that even though the agreement was satisfactory at the time it was made, fundamental reasons for the failure of the DDCP were actually stemmed from the agreement. A large part of this, again, stemmed from institutional and cultural contexts of Korea. By examining situations and judgements in the processes of the projects, possibilities for better and more just planning practices are explored. Consequently, implications for the Korean planning system and planning in justice literature are demonstrated.

References
Do-It-Yourself (DIY) Urbanism includes a wide range of spatial appropriation practices including guerilla gardening, using vacant buildings for co-operative activities and other temporary transformations of neglected urban spaces. As DIY Urbanism projects often emerge from grassroots efforts privileging use over exchange value, some scholars suggest these practices challenge neoliberalism by enacting emergent forms of urban citizenship. However, others argue that such place-based projects lack coherence and specificity in their agendas and are too localized to have critical potential. This critique is valid if one assumes DIY Urbanism must reflect a resistant agenda explicitly aimed at producing socially just outcomes. Assemblage theorists challenge this assumption by arguing that new publics can emerge from disruptive, novel assemblages of affects, materiality and discourses. In other words, how does playing with streets, buildings and vacant lots create unexpected connections, new uses and collective claims for urban space?

In order to analyze the critical potential of these informal, creative spatial practices, this paper discusses “embrACE the STREET”, a DIY Urbanism collective in Fort Worth, Texas. embrACE transformed a depressed commercial corridor into a walkable arts district. Through participant observation and interviews, I trace the connections between artists, residents, activists, realtors, city officials, developers and a collection of vacant buildings, lots, trees and streets to identify emergent relationships, agendas and outcomes. Although some actors assumed the project could advance social justice concerns, others hoped that the project would gentrify the area. Clearly, embrACE reflects conflicting interests.

The project’s ambiguity should not automatically discount embrACE’s critical possibilities. The commercial corridor - the street, buildings, animals and plant life - enabled unlikely relationships to develop among antagonistic identities. Indeed, embrACE engendered an emergent feminist and postcapitalist public through practices such as an artist cooperative, community garden and galleries. However, this assemblage may prove too fragile to withstand development pressures. Currently, many properties on the street are now under contract by a developer, indicating that the DIY interventions may have catalyzed neighborhood change processes. The developer’s interests, which are supported by city officials, threaten to disrupt and displace these emergent forms of cooperative economic and social activities.

However, this paper suggests that novel assemblages of material, affective and discursive practices, including creative appropriations of urban space, can enable just social and economic arrangements despite neoliberalism. As such, the paper concludes with a discussion of how critical planners can use DIY Urbanism to help assemble the conditions of possibility for collective, ethical relationships in diverse urban communities as well as offer support for these emergent publics.

References
Drawing on planning theory, cultural anthropology and science and technology studies, this paper examines the dynamics of futurity in the redevelopment of postindustrial Detroit. Futurity concerns how planners, developers, citizens, and others engage positively or normatively with what has ‘yet to come’, and it can take numerous forms. It involves how a sense of the future acquires structure, through references to the short- or long-term, ‘windows’ of opportunity, or new eras; it encompasses how the future is envisaged, through anticipation, imagination, or scenarios; it refers to the character of these futures, whether they appear plausible or desirable; and it also obliges action in the present, such as preparedness or mitigation of risk. America’s postindustrial cities are ideal sites for tracing how such mechanisms of futurity intersect with urban planning and policy-making.

Detroit’s pronounced economic decline has eroded the teleological confidence the city once enjoyed, and its vast tracts of abandoned residential, commercial and industrial land have now become a major focus for comprehensive projects of civic reimagination. Because such articulations of the future are no less laden with knowledge claims, value judgments, and uneven power dynamics than those directed to the present, they warrant critical attention. Exactly how do modes of anticipation, belief, hope, or strategic thought pertain to urban change? How and by whom are they produced, and whom do they affect? What sort of power dynamics do they imply? How are they disciplined, regulated, contested, or endorsed? And, crucially, what consequences do they have for the tenets of participatory planning and urban wellbeing? [cf. 1]

Methodologically, the paper centers upon a seven-month ethnography of the City of Detroit Planning and Development Department. As a guest researcher, I have been granted access to observe and participate in an overhaul of the City’s official Master Plan, shadowing the Department’s staff as they engage various institutions, organizations, and citizens in the planning process. Throughout, I have closely documented how Detroit’s planners actually create, and respond to, alternate future visions for the city, how they make predictions about Detroit, and how these are woven into their words, actions, routines, and strategies [cf. 2]. The ethnography is supported and contextualized by approximately one hundred taped interviews and oral histories with planners, institutions, organizations, and citizens involved in Detroit’s planning processes, as well as archival research conducted at Wayne State University’s Walter P. Reuther Library, the University of Michigan’s Bentley Historical Library, and the City of Detroit’s unofficial document repository. These materials enable a close reading of how alternate senses of Detroit’s futurity are produced, how they move against one another, and the political work they perform.

In drawing attention to how futurity settles affairs in the present, the paper makes the case for explicit and critical engagement with the temporal dynamics of planning practice which tend to be left implicit or ignored. A concern for the future is intrinsic to planning. Yet professional efforts often strive to anticipate the ‘future of’ urban processes as though future housing or transportation patterns exist independently of predictions, strategies, dreams, fears, or prejudices. There is thus a risk of losing sight of the ‘looping effect’ [3] through which futurity functions simultaneously as a rationale and a cause for action.1 The prophetic neighborhood analyses conducted by the Home Owners’ Loan Corporation in the 1930s, for example, undoubtedly influenced later patterns of residential blight. As Buzz Bissinger puts it, “by predicting the obsolescence of so much of the city, they had guaranteed it; by promoting the promised land of the suburbs, they had guaranteed it” [4]. In this paper, I attempt to trace the way such forces operate and evaluate their consequences for urban redevelopment.

References
How does planning theory address citizens and non-citizens in a place? Does planning practice need -- and can it develop -- updated strategies to address the dynamic of immigration in planning schemes? Thus far, planning practice has not addressed the concept of citizenship directly but rather obliquely through the adaptation of the notion of inclusion and participation from a nation-centered perspective. However, there is hardly any literature that focuses on the problem of refugees, possibly because planning acts as an arm of the nation-state where the immediate and temporal needs of refugees are not seen relevant within the long process of national and municipal planning. Yet, the way citizenship is perceived and dealt with in the process of planning stands at the heart of the discrepancies of spatial production. Thus, as long as planning does not take both a moral and a pragmatic approach to the issue of citizenship, it fails to address justly the contemporary landscape of cities, with their multiethnic groups, migration and transnationalism. As such, it can only enhance the polarization of cities with their growing “shadow”/”gray” entities that exist at least partially outside of the gaze of state authorities and city planners.

References

Justice and The City: (re)Examining the Past to Create the Future
55th Annual ACSP Conference

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The recently resurrected theories of the "right to the city" and the "just city" represent new paths for scholars in the disciplines of planning, urban studies, and the social sciences seeking to address the injustices, insecurity, poverty, and inequalities of contemporary cities. Numerous theorists have contributed to the emerging knowledge in this critical field, which explores the intersection of rights, citizenship, and cities. At the heart of this paper stands the question of whether recent urban planning practices follow these normative theories of justice and human rights. In other words, do contemporary city plans reflect the emerging normative discourse of justice? An examination of seven recent inclusive and master plans of developed and underdeveloped cities around the world took place in order to address these questions. These cities include New York City, London, Paris, Moscow, Delhi, Amman, and Beijing. The main conclusion of this study suggests that planning practices are extremely lagging behind the emerging theories of justice. Moreover, it seems that each field of both practices and theories plays in different and disconnected planes. Almost, they do not interact but at the very margin. In this paper, we are looking for the lacking framework that have the power to bring theories and practices under one plane. A plane that induces normative planning theories infiltrate the ethics of planning practices.

Abstract Index #: 619
ILDEFONSO CERDÀ AND PATRICK GEDDES: (RE)EXAMINING CITIES AS COMPLEX SYSTEMS
Abstract System ID#: 814
Individual Paper

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About 50 years ago, Jane Jacobs argued in The Death and Life of Great American Cities (1961) that cities happen to be “problems of organized complexity”, comprised of many factors varying simultaneously and in interconnected ways. While cities have traditionally been the province of urban planners, since Jacobs’ treatise there have been only intermittent studies of cities being understood as complex, adaptive and dynamical systems. Today, planning theory remains slow in embracing complexity theory in order to understand the seemingly disparate flux and cyclic processes of energy, materials, information and costs of an urban system. Jacobs asked, “Why have cities not, long since, been identified, understood and treated as problems of organized complexity?” It is the intent of this paper to respond to this question by (re)examining the past, in the form of a comparative analysis of two visionaries that viewed cities as complex systems; Patrick Geddes (50 years prior to Jacobs), and Ildefonso Cerdà (50 years prior to Geddes).

In following the theoretical thread for a synthesis between urban planning and the science of complexity, the path leads upstream through Ian McHarg, Lewis Mumford, Raymond Unwin, Ebenezer Howard and eventually to the riverhead known as Patrick Geddes (1854 – 1932). As a botanist, sociologist, geographer, and town planner, Geddes’ planning concepts were derived from geographical and biological principles. Another earlier attempt to synthesize planning and complexity is found in the work of Ildefonso Cerdà (1815 – 1876). Cerdà viewed the city the same way a functional biologist views biological processes; that is, in terms how something is developed and functions.

While the paths of Cerdà and Geddes do not directly intertwine, they do share in common certain aspects for use in a comparative study. Each had a primary publication which defined their planning theory, and each applied their theory to an iconic public plan for a particular city. Cerdà’s primary work was Teoría General de la Urbanización, the General Theory of Urbanization (1867). Geddes’ primary work was Cities in Evolution (1915). Cerdà’s primary theoretical application was with the City of Barcelona, in the form of a master plan for the city extension known as the Eixample / Ensanche. Geddes applied much of his theoretical work within the City of Edinburgh.

This comparative study between Cerdà and Geddes, as it relates to complexity theory, is boundaried within the following two parameters. Firstly, from a broadscope perspective, an explanation of the planners theoretical systems is provided within the context and trajectory of their times. Secondly, from a narrowscope perspective,
the study resides primarily with the unique ability of Cerdà and Geddes to derive planning theory from a synthesis of social and natural sciences, and more specifically, with that of complexity theory. And while there was not a direct relationship between Cerdà and Geddes, they were familiar, or shared relationships, with other notable writers, scholars and scientists of their time, who serve as a means of indirect reflection for comparative purpose. It is through these various lenses that the following comparative analysis will be assisted.

Relative to today’s reductionist disciplinary research, generalists such as Cerdà and Geddes had a unique vantage point to view the world as greater than the sum of its reduced parts. Relevant to this year’s ACSP conference theme of ‘Justice and the City’, this paper (re)examines the past for insight on future cities as complex systems. Both Cerda and Geddes were humanists, and their theories were intended to result in the ultimate egalitarian city. The intent of both Cerdà and Geddes was to improve living conditions within the city in reaction to the adverse impacts of the Industrial Revolution. Their separate paths were similar in that they embraced scientific inquiry to seek a new model for urban planning that viewed cities as “problems of organized complexity”.

References

Abstract Index #: 620
KNOWLEDGE OF WHAT, ACTION FOR WHOM: REFLECTIONS ON THE ROLE OF POLITICS IN PLANNING PRACTICE
Abstract System ID#: 861
Pre-organized Session: Can Planning Change the World?

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This paper argues that the biggest challenge for planners who seek to link the “is” and “ought” lies in their willingness and capacity to understand existent power structures and their malleability. Using materials drawn from case study research on the role of politics in enabling and constraining sustainable urban development (through the lens of housing and transportation policy in a variety of cities around the world), I suggest that strategic leveraging of political institutions and practices is central to the achievement of efficacious planning outcomes. This claim not only has implications for planning education (i.e. justifying a call for the teaching of politics in planning programs). It also suggests that planners must become more cognizant of the ways their normative aims can be framed politically so as to unite political actors in the state and civil society behind effective action strategies that maximize shared goals of justice and equity.

Abstract Index #: 621
BEYOND THE NEOLIBERAL TURN IN PLANNING: REVISITING THE MISSION OF URBAN PLANNING AS A CORE GOVERNMENT FUNCTION
Abstract System ID#: 866
Individual Paper

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Cities change continuously in a context of shifting state-market-civil relations and accelerating dynamics of socioeconomic and demographic processes. The current dominant neo-liberal drivers for growth and investment
constantly challenge and redefine societal arrangements. Deregulation, privatization and commercialization of government activities are encouraged for economic urban progress. Public assets are sold and reinforced by austerity policies and decentralized funding. Moreover as result of the New Public Management public administrations’ neo-liberal emphasis on efficiency and effectiveness public goods and services are increasingly contracted out to the market. This has resulted in an ongoing debate that cities are becoming more inequitable and unsustainable. What is the role for planning in this process?

The neo-liberal turn in planning is characterized by a push for increased flexibility of planning procedures. Debates over reforming the planning system and modernizing government agendas often end by abolishing part of the planning system in favor of further deregulation. Currently across the world a trend for simplification and/or mergers of regulations to stimulate growth and decrease bureaucracy is visible. Although in cases where regulation is deemed obsolete and/or unworkable and only perceived as unnecessary bureaucracy it does make sense to enable people to think, plan and develop ‘outside the box’, it is important to avoid throwing the baby out with the bath water. The regulatory frameworks and processes reflect normative values and ideas to achieve socially and environmentally sustainable outcomes. Urban planning is about steering change while meeting core social, environmental and economic policy imperatives to manage and direct the changing city.

The notion of fairness and justness hardly receives attention on neo-liberal agendas. However, equity issues and the pursuit to achieve just land use outcomes – environmentally sustainable and socially equitable outcomes -- are the key challenges planning systems should address.

This paper argues that the key focus in urban planning always has been but also continues to be the need to balance public goods values with short-term investment opportunities of the market. Planning is – and will be – a core government function and an important public intervention process for debating the politics of land use. It should ensure equity in decision-making processes to get to equitable outcomes, instead of becoming just as subservient to bottom-up development demands. Planning processes might cause delays and/or frustrations but it should not be ignored that the aim is to provide important social and environmental community benefits. Yet due to the neo-liberal turn in planning across the world planners and politician seems to have forgotten how to think – and discuss – about values. The paper concludes with a call to re-implement more substantive debate on values in planning to counterbalance the growing focus on tools and process.

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from both inability to pay and a sense of justice. Using qualitative interviews with 25 low income New Yorkers, and 15 social service providers and transit advocates, this paper finds that fare evasion and its consequences are changing as fare payment becomes more remote and seamless. It is found that many riders expect bus drivers to allow them to ride, from time to time, with insufficient cash payment. Fare evasion on bus rapid transit, which uses an honor system, is enforced by the police rather than at the discretion of the bus driver. The authority which would allow an occasional fare beater to access the system with little money is thereby removed from a potentially sympathetic actor to one who is punitive. Fare beaters on the bus are changed as a result, from riders accepting a kind favor from a driver, to nervous criminals hoping not to be caught. In addition, riders often deem fare beating justified and help others beat the fare when they can. The finding belies a sense of belonging in the transit system and reiterates expectation of universal access to collectively consumed public goods and, more broadly, public space. Riders may consider the fare to be a reasonable gating mechanism, however their right to this part of the city supersedes their obligation to pay.

References

Abstract Index #: 623
THE LASTING IMPACT OF “POP-UPS”: TEMPORARY URBAN REVITALIZATION AS CIVIC ENGAGEMENT

Communicating an urban vision is central to the practice of planning. Throughout history, policymakers, practitioners and other urbanists have expressed planning ideas to the public through photographs, models, exhibits, and brochures. By the late 20th century, criticisms of top-down, expert-driven planning that embraced highly technical plans and ignored community concerns led to new participation methods that helped the public express their own ideas. These included charrettes, focus groups and, more recently, social media and data visualization. One relatively new means of communicating an urban vision is through so-called “pop-up” projects, which are intentional temporary revitalization strategies that can last from a few hours to a few years. Pop-ups involve diverse groups who occupy urban spaces for various purposes, including proposing alternative futures or protesting urban policy. Such grassroots interventions move beyond traditional placemaking in their attempt to influence urban development outcomes. Pop-ups take on many forms including: parklets, seedbombs, ciclovias and guerilla wayfinding. Evidence remains mixed about whether pop-ups, which are a form of civic engagement often occurring outside of traditional planning boundaries, have any lasting influence urban policy or planning.

Thus, I ask: (1) to what extent do pop-ups function as an unrecognized form of urban civic engagement and (2) how successfully do these temporary revitalization strategies change urban development outcomes? I use a national survey of 150 organizations that employ pop-up projects to influence urban policy. Survey targets represent a broad spectrum of project types, geographical locations, and organizational structures. The findings show that pop-ups excel as a form of civic engagement and inclusionary participation to attract new stakeholders to urban planning discourse. By initiating a highly visible and aesthetic demonstration, pop-ups educate the public about urban issues, illustrate to policy makers differing opinions of urban investment, and put forth an alternative vision for the future of cities. While these projects are often successful at rallying the public, they have mixed results when it comes to effecting lasting change in urban development practices. In part, this reflects the planning profession’s inability to support and institutionalize such “urban flux” (Hack 2011) through policies and regulations. Additionally, pop-up leaders have difficulty breaking through traditional participation barriers and remain outside formal urban decision-making processes for planning and development. Because temporary
pop-ups are such a new phenomenon, it will take time for their advocates to create and catalyze long-term change and for planners and urban policymakers to determine how to incorporate these projects as a form of public participation. This research offers insight for the planning profession about a new, grassroots method of communicating an urban vision wherein diverse participants express their preferences about urban development. The research also suggests that planners will need to become nimble in incorporating new forms of engagement, whether it is pop-ups, social media, or the next idea just over the horizon.

References


Abstract Index #: 624

EQUITY PLANNING IN LEGACY CITIES

Abstract System ID#: 889

Individual Paper

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Equity planning ties in well with this year’s conference theme. The concept built on a dialogue about theory begun by Paul Davidoff, in the 1960s; equity planning evolved from advocacy planning. Cleveland’s Norman Krumholz, his colleagues, and allied scholars (Krumholz and Forester 1990, Krumholz and Clavel 1994) championed the idea of attending to the interests of the disadvantaged as a value framework for professional planning decisions. For some cities, however, practical difficulties have made it very difficult to pursue the original concept of equity planning as a framework for action. In cities with severe decline in population and tax base, “legacy cities,” both the ability to influence decision-making and the “pie” of municipal benefits may have shrunk markedly. Some recent works (Fainstein 2010, Marcuse 2009) have called for enhanced planning for social justice, a broader term, but have not clarified how to address this concept in such cities. This paper argues that equity planning is still useful as a strategy for social justice, but needs adjustment in highly-constrained situations. Our purpose is to begin to delineate a potential framework of action for legacy-city planners who face difficult social, economic, and fiscal circumstances.

The approach of this theory-driven paper is historical but based as well on a case study of contemporary planning in a severely-constrained city. First we will explore historical material on the nature of advocacy and equity planning and describe the original proposals’ connection with distressed city contexts. Then we will compare traditional definitions of equity planning with the newer “social justice in planning” literature to discern key theoretical similarities and differences. Finally, using a case city, Detroit, and a specific process, planning for the strategic plan Detroit Future City, we will report on a series of at least 16 interviews with knowledgeable observers, 14 of whom were planning or allied professionals. These interviews showed that planners in this distressed city have remarkable resiliency and have made notable efforts, not all unsuccessful, to support equity planning or planning for social justice in Detroit. However, analysis of their comments and experiences suggests that certain specific aspects of the traditional understanding of equity planning need revision in contemporary contexts such as theirs, particularly concerning the need for alternative employment contexts and the importance of dialogue (Fischer 2009).
The relevance of this paper is that planning is still operating in legacy cities, but under much different circumstances than planning in more prosperous locales or even in those same legacy cities when times were not so hard, in previous decades. Nevertheless, even with constraints, planners may still be informed by social justice inclinations and they may aspire to the concept of equity planning. We need a better understanding of ways that the original concept of equity planning connected with the conditions of the city of Cleveland in the 1970s; ways that some planners working in cities even more distressed than 1970s Cleveland have adjusted to circumstances and yet kept their essential principles; and implications for how we teach about, understand, and promote equity planning. We will end the paper with a proposal for definitional adjustments for the theory of equity planning in today’s distressed “legacy” cities, with specific suggestions for alterations in practice, particularly the ways we train social activists in this tradition.

References

Abstract Index #: 625
JUST OUTCOMES AND THE “GOOD” CITY?: BALANCING POLICY OBJECTIVES OF THE FEDERAL SUSTAINABLE COMMUNITIES INITIATIVE
Abstract System ID#: 916
Individual Paper

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Theories in planning respond in part to the challenges of practice, producing guidance to planners on the process, shape and character of the “good” city. Among others, contemporary planning theory discourse presents the communicative model, the new urbanist approach and the political economy model, each presenting differing conceptions of a good city: one that prioritizes a democratic process, one that prioritizes spatial livability, and one that prioritizes justice (Grant 2006). A key tension underlying these differences in the principal normative standards for planning is the debate about in whether the “good” city is realized based on the presence of an inclusive planning process or an equitable outcome (Fainstein 2010). Furthermore, should planners intervene in a planning process to advocate for normative concepts of the “just” city?

In 2008, the Obama Administration was the first to promote and pursue a set of policy principles related to sustainable development and livability, effectively defining the nature of the “good” city for U.S. local and regional governments (Gough 2015). Through a partnership between HUD, DOT, and EPA, the Sustainable Communities Initiative (SCI) provided grants in 2010 and 2011 to support regional planning and development efforts that coordinate housing, transportation and other infrastructure investments to reduce energy consumption and environmental degradation and expand resident access to employment. Helping to address limited attention to equity in sustainability initiatives across U.S. communities (Opp and Saunders 2013), the three agencies sought to enable more just outcomes by removing federal regulatory and policy barriers to sustainable development in distressed areas. In addition, funding was targeted to regions that prioritized efforts in economically distressed areas, and which detailed inclusive processes to engage underserved or marginalized populations.
Using survey data, interviews and document analysis, this paper analyzes the process and the outcome of the three-year SCI regional planning grant in four funded regions. Details associated with the planning process, context and resulting plans in the four regions are examined to discern success in realizing the nature of the "good" city prescribed through SCI, and the degree to which the just outcomes were possible. Implications for regional sustainable planning and policy are discussed.

References

PUBLIC AT A PRICE: USER FEES AND ACCESS TO PUBLIC SWIMMING SPACES IN NEW YORK CITY

A long history of ambivalence over whether or not to charge a fee for entry surrounds the municipal bathing project (including different kinds of pools and bathhouses) in New York City. In the second half of the nineteenth century, many of the reformers who promoted bath houses believed that a fee for entry, of even a small amount would teach very poor New Yorkers, mostly immigrants, the value of state or philanthropic provision of the baths. Beginning in the 1930s, when 11 enormous outdoor pools were constructed under parks commissioner Robert Moses, the reason for charging a fee—or at least the official line—was most often to balance the Parks Department budget. However, the nominal fee continued to operate for many years after its monetary value had been minimized. In the 1980s, the Parks department abolished the entry fee for outdoor pools in the summer, but later imposed a fee for indoor pools at municipal recreation centers (many of them formerly free bathhouses.)

In this paper, we probe the function and meaning of user fees as a mechanism of access to urban public space. We use the case of admissions policies for swimming pools and public recreation centers in New York City from the 1970s to the present to ask how the imposition of fees affects people’s access to recreational space, the distribution of that space among constituencies, and those constituencies’ sense of belonging in the city. In the process, we interrogate the multiple logics behind recreation user fees, from rationing under scarcity to recovering costs under austerity to safeguarding citizens’ morality. In problematizing the access fee, our paper addresses both theoretical questions about the nature of public space and practical ones about how municipal administrators govern amidst competing pressures to serve, develop and regulate urban residents.

References
There is a growing need for clear understanding and effective application of an ecological approach to urban and regional planning and design. Over half of the global human population now lives in cities (UN DESA, 2013, p. 89), and humans now find ourselves in an unprecedented position: along with long-recognized ecological impacts at local and regional scales, we have become the primary drivers of fundamental changes to Earth processes, including nutrient cycles, resource cycles, biodiversity, ocean chemistry, and climate patterns (Sayre et al., 2013, p. 339). Scholars across disciplines show a growing awareness that human well-being, social justice, economic stability, urban form, natural resource use, environmental quality, and ecosystem health are not separate issues, but a system of interconnected, interdependent problems and opportunities.

As these traditional dualisms—human vs. nonhuman, built vs. natural—dissolve, scholars face a transdisciplinary landscape that is increasingly compelling but also increasingly challenging. As Miller et al. explain, “the disciplinary structure of knowledge itself” can inhibit communication between different intellectual domains, which value different forms of knowledge and produce those knowledges in different ways (2008, p.4).

This is the challenge for the emerging field of ecological planning, which by its very name takes place at the interface of human systems and ecosystems. Especially difficult is the development of a transdisciplinary theoretical language and framework, including critical reflections on history, politics, and power, as well as explicit formulations of normative principles (Wilkinson, 2012, p. 149). At the same time, as ecological planners have struggled to produce more rigorous theorizing, planning theorists have faced a parallel challenge: the call to return a sense of materiality, substance, and realism to a body of thought from which “the ecological crisis… is still surprisingly absent” (Harrison, 2014, p. 66).

This paper argues that there is potential for mutual gains between ecological planning and planning theory, with each field’s stronger points helping to bolster the other’s weaker points. The paper further argues that interdisciplinary literature from the environmental humanities provides the language and analytical content needed to realize these mutual gains, while also benefiting from more direct exposure to the planning field. I show that the synergies between these three domains add up to more than the sum of their parts, or of any two considered without the third. I highlight those synergies, furthering the capacity for transdisciplinary collaboration both within and outside of the planning discipline.

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Policy analysis is a complicated field grappled with complex social and political dimensions and problems. It is a multi-faceted field which requires taking a self-critical position within public policy field. Therefore, policy analysis has been a field where a multitude of methods and tools such as qualitative, quantitative, and discourse analysis among others have developed (Enserink, Koppenjan, & Mayer, 2013). Yet, it needs to be opened to a wide variety of different methods and the toolbox of policy analysis should be extended with new research tools (Fischer, Miller, & Sidney, 2007).

Indeed, policy analysis includes contributions from different fields of knowledge such as political studies, economics, and psychology, among others. This paper deploys a logic approach that has been inaugurated initially in political studies by Laclau and Mouffe (1985); then, developed by their students including Glynos and Howarth (2007) and entitled the Essex School of Discourse Analysis (ESDA). The method is not simply a Discourse Analysis method that focuses on reading texts or considering the language of documents. Instead, a logic approach has been applied in policy analysis to investigate how and under which political and social circumstances, a particular policy logically supersedes all other alternatives. Based on ESDA, this paper deploys a logic approach to critically analyse how three logics social, political and fantasmatic work to make possible a practice of urban development in Iran within Tehran metropolitan area. Through an ontological investigation on the status quo of land use policies, this paper scrutinises the logics that operate together to make possible a practice of land development. This novel method is being deployed for the first time in planning by the researcher to explicate the logics which have created Parand as an extension within the Tehran metropolitan area. Since ESDA is a problem-driven approach, the focus of the ontological investigation is on the logical existence of the policy. It will be explained that the practice offers a neoliberal policy relied on the simplistic rationality of demand and supply sides, serve market logic through land supply policies. Therefore, the status quo of the policy overlooks complex logics of the practice.

To perform the research, the creation of Parand as a new development is categorised into four historical phases. This categorisation assists the logic approach to explain how the practice of metropolitan extension operates as a neoliberal policy through wide varieties of actors in order to respond to the demand for affordable housing. At every phase, it will be explained how political and fantasmatic logics are associated with the social logic to make the practice and to maintain it at both the social and psychological levels of different actors in the land development process. Three logics of social, political, and fantasmatic analyse the impacts of different actors including state, citizens, local institutions, as well as regulations upon the use of land. The paper suggests a new and effective method of policy analysis in general and land-use policy in particular.

References
Postmodernist planning theory depicts planning as a political activity. Contrary to the modernist notion of planning as an objective practice in which neutral professionals employ technical expertise to address urban issues, postmodernists have politicized planning theory. In an attempt to more accurately describe the realities of planning practice, postmodernists strive to account for power structures in which planning is embedded (Baum 1996).

The investigation of what planners do and the planning theories that derive from such studies tend to focus on planners working for the public sector and/or for the advancement of progressive goals (Hoch 2011, Forester 2009). Ideally, these professionals are expected to utilize their technical expertise to carry out a series of activities aiming at the community’s well-being. In theory, planners in public agencies at the local, metropolitan, or state levels serve the public’s interest. While these claims are controversial and have been contested (Yiftachel 1998) the characterization of planners as well intentioned and planning as a progressive practice is widespread.

This paper addresses an important limitation of current planning theories by analyzing the work of planners in the private sector who are involved in the creation of elitist enclaves. The work of the professionals who were observed and interviewed encompasses the development of feasibility studies, design plans, construction drawings, descriptive memorandum, and marketing material for upscale gated communities in Brazil. The analyses of qualitative data utilized a practice theory lens to uncover what planners do, how they do what they do, and how they make sense of their work.

Two findings stand out: the first relates to the planners’ use of discourse to convert regressive outcomes into desirable and legitimate goals; the second is the planners’ attempt to portray their work as apolitical. This paper focuses on the latter and uncovers the mechanisms through which the de-politicization of planning practice occurs. For instance, the observations presented here reveal that planners often refer to their work as objective, technical, and neutral. Paradoxically, while acknowledging the role of power, politics, and negotiation in the planning process, planners strive to portray themselves as service providers.

Thus, this paper contributes to the understanding of planning practices by shifting the objective of study from the public to the private sector, from planning in developed countries to planning practices in the South, and from planners’ involvement in the advancement of progressive goals to their role in perpetuating segregation.

References

Abstract Index #: 630
HOW BIG IS AN ACRE? AN INVESTIGATION INTO ORDINARY SPACE
Abstract System ID#: 1028
Individual Paper

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Since it is 43,560 square feet, the question may remind us of Homer Simpson’s question: “Quick Marge, how do you dial 9-1-1?” Some theorists would sympathize with Homer: they understand space in terms of social and historical categories—a concept for which Henri Lefebvre’s work is given as a prominent citation. The acre is, in
their view, historically generated, having originated in late Medieval England for regularizing feudal landholdings. Many planners of theoretical bent embrace the idea that “spatiality” is a social and cultural product. To be sure, thinkers of a more scientific frame would hold that the acre has an empirical referent measurable through well-established means; but spatial theorists will retort that the surveyors, land officials, etc. have in mind a conceptual space that is technocratically defined. Is there, then, no such thing as an acre we can mutually understand, across cultures? With historical illustrations of homely things, such as an acre, a rock, or a tree in the distance, this article claims that we can indeed. The acre originates in the lived experience of the drover, who found that his oxen could plow about one furlong in a stretch, and might accomplish four furlongs in a day; so it is that an acre as a furlong times four rods. Though it is hard to now put oneself into the shoes of a drover of oxen, it is possible through some effort to understand, or at least empathize with, his lived experience of space. Perhaps ordinary things are, after all, universally accessible, to some satisfactory extent. If there can be an ordinary-language theory of reasoning, perhaps there can also be a ordinary-space theory of spatial orientation. It would hold that each competent and healthy adult, of whatever period and culture, can cultivate the sharable experience of an acre, or a rock. There are, then, not specifically empirical universals but recoverable experiential universals in the understanding of space. If so, we should be teaching our students not hyper-skepticism about cross-cultural and cross-historical understanding, but rather the confidence by which to resuscitate the nearly lost arts of appreciating our surroundings.

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Abstract Index #: 631
FOOD SOVEREIGNTY AS ENTRY TO A NEW LAND: INSURGENCY, LINES OF FLIGHT, ASSEMBLAGES, AND RHIZOMES
Abstract System ID#: 1045
Individual Paper

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For the past several years, a dialogue has spread at ACSP about the relationship between planning and its commonly practiced forms—relatively rational, communicative, and collaborative, the state, and non-state organizing or autonomous planning. Two sessions in Philadelphia, one on planning and autonomy and another on the application of the radical political theory of Deleuze and Guattari to planning (which was itself a follow-up to a paper presented at ACSP-AESOP in Dublin) exemplify this growing discussion. This paper takes up that conversation, building on the question of “what would planning according to Deleuze and Guattari look like?” Or, read the other direction, what are the intersections of grassroots community resistance and insurgent planning with the political theory of Deleuze and Guattari?

Critical of the state, and thus deeply suspicious about planning, Deleuze and Guattari provide important questions for planners to consider, especially in the context of neoliberalism, corporatist globalization, and virtually unrestricted campaign financing (in the US case). In this light, what can planners be expected to do, when the state within which they are embedded essentially rejects many of the foundational claims to equity, advocacy, and broad notions of the public good that are the bedrock of planning’s ethics? Would such a counterhegemonic planning be consistent with insurgent planning, planning consistent with Deleuze and Guattari, or both?

Accordingly, this paper contrasts planning consistent with Deleuze and Guattari with insurgent planning, and uses two cases embedded in critical food studies to demonstrate how and whether non-state actors acting both
autonomously and collectively might be examples of such practice. Through interviews and participant observation it examines forms of indigenous agricultural and community governance practice in Oaxaca, Mexico, and an example of food-based alternative education and youth empowerment in Seattle, Washington. In each case there are examples of the rejection of dominant state (or state-like) structures in favor of more radically democratic practice.

How might these be understood, both internally and in a more generalized sense? This paper argues that such non-state activities are pervasive, important, and can be understood using the vocabulary and structural principles provided by Deleuze and Guattari. They offer individual and community autonomy and empowerment, and the ability to resist oppressive structures in meaningful ways. Ultimately, such efforts come back to a larger question of the relevance and meaning of planning in contemporary society. They speak as well to possible strategic ways of socially organizing to resist capitalistic state oppression and seek more socially just and democratic outcomes, perhaps through planning.

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Abstract Index #: 632
THE DILEMMA OF OPENNESS: CHALLENGES OF PLANNING IN OPEN SPACES AND COMMUNITIES
Abstract System ID#: 1046
Individual Paper

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This paper explores the challenges of planning in the context of open spaces and communities. An open space is any space that (1) is permeable to potentially anyone who wants to participate in its development and (2) whose inner functioning and relationship with its context are open to debate and therefore are in the process of construction. Open space is also associated with the notion of autonomy and self-organization. Examples of autonomous projects and open spaces include non-institutional neighborhood assemblies, Zapatista autonomous municipalities, self-organized social centers, occupied factories as well as protest encampments and communes. Open space should not be confused with public or outdoor space, as there could be open spaces in indoor or private spaces (i.e. neighborhood assemblies, social centers); in the same way that some spaces that are visible and accessible to anybody are sometimes regulated in a way that do not allow for self-organization.

The paper particularly focuses on analyzing the following dilemma: if spaces and communities remain open to anyone, they can potentially grow in diversity and complexity, but compromising their initial coherence. On the other hand, if space and community are bounded, then they keep coherence but cancel the possibility of renovating themselves with external contributions. Thus, the question arises: exactly how much complexity can open spaces and communities host without losing coherency? And moreover, how can spaces and communities renovate themselves when their internal logics and discourses – even though provide coherency – become obstacles for creativity and innovation? Interpreting how boundaries operate between a community and its space, and its context is key to understanding this dilemma.

This dilemma is often present in planning processes in the context of autonomous communities, and participatory, horizontal and direct democracy social movements. In a world in which social groups and spaces are increasingly interconnected and interdependent (virtually and physically), and identity and physical
boundaries are blurred, the “dilemma of openness” becomes a crucial one to understand for planning theory and practice.

Building on theories of autonomy (Chatterton, 2005, Lotringer, 2007) and the work of Deleuze & Guattari (1987) (Hillier, 2005, Purcell, 2013), and drawing from fieldwork that examine the conflicts that arose in identity building and place-making processes in the context of two social movements (i.e. the Spanish Indignados and Occupy Wall Street), the objectives of this paper are (1) to explore the potential for innovation and creativity in planning processes in the context of open spaces and autonomous projects, (2) to analyze the implications of opening spaces of participation for the democratization of city-making and (3) to explore possibilities to transcend the “dilemma of openness” in planning processes.

References

Abstract Index #: 633
PLANNING, PROPERTY RIGHTS, AND THE TRAGEDY OF THE ANTICOMMONS: TEMPORARY USES IN PORTLAND, CHICAGO, AND DETROIT
Abstract System ID#: 1069
Individual Paper

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Over the past ten years, there has been a growing interest in the potential for temporary uses as a flexible response to vacant lots and storefronts and a tool for encouraging revitalization. Much of this literature lacks a theoretical framework for interpreting and understanding what is being observed. This paper attempts to expand understanding of the temporary uses by using the Tragedy of the Anticommons and informality literatures to explore how temporary uses have emerged as a potential solution to the tangled array of overlapping property rights and regulatory regimes that have limited the redevelopment, rehabilitation, or reuse of underutilized properties.

The paper first provides an explanation of the concepts of the Tragedy of the Anticommons and informality and analyzes underuse of property and stalled revitalization using these theoretical lenses. Particular emphasis is placed in the paper on the importance of the ownership of properties and the underlying logic of US planning and regulatory regimes in both hindering the development of temporary uses and providing spaces (often informal) for their creation. The second part uses these concepts to examine how actors have attempted to navigate the ambiguous position of temporary uses within local planning regimes. Three examples – food carts in Portland, Oregon, neighborhood markets in Chicago, Illinois, and pop-up shops in Detroit, Michigan – are used to highlight specific challenges faced in trying to negotiate informality and the complicated task of navigating local land use regulations, retail markets and political environments to successfully create viable activities that contribute to revitalization.

The paper demonstrates that the fragmentation of property rights and the transaction costs associated with coordination of actors whose participation is necessary to successfully realize a new development or use are vital
for explaining vacancy and underuse. It also demonstrates that temporary uses can be valuable contributors to revitalization by circumventing or reducing property rights or coordination issues. However, the cases also reveal some of the potential drawbacks of temporary uses including entrenchment of these uses frustrating attempts to develop permanent uses (Portland), cooptation of temporary uses crowding out small entrepreneurs (Chicago) and transition of temporary uses to permanent uses requiring substantial time and skill (Detroit). They also reinforce that the process of formalizing informal uses can be a new avenue for the exercise of power and the reallocation of resources.

References


Abstract Index #: 634

“COGNITIVE CONVERSION”: MOBILIZING THE SOCIAL IMAGINARY FOR INSTITUTIONAL REFORM

Planning processes concerned with institutional change send out ripples of uncertainty that may manifest in multiple forms of resistance from subtle procedural barriers to outright political opposition. Transformation of knowledge, attitudes, and allegiances among influential actors who inhabit these institutions can be critical in building support for the implementation of reform. One strategy available to planners anticipating resistance (Friedmann, 1997) is the design of planning processes that address likely challenges and prepare key stakeholders for implementation. Recent planning research has highlighted linkages between cognitive and institutional change, including cognition’s role in institutional design through the power of image and metaphor (Neuman, 2012) and consideration of the process by which institutional actors’ cognition, actions, and beliefs can change through meaningful learning (Kim, 2012). This convergence may inform the design of planning processes that leverage cognitive change to penetrate and alter the social imaginary that undergirds commonly accepted understandings and practices (Taylor, 2002), thus opening the door to institutional transformation.

Exploring the nexus of change between individual and collective frameworks for meaning making and institutional philosophies and practices is at the heart of this study. I pose three questions: (1) What is the role of human cognition in institutional change? (2) Can planning play a role in institutional change by facilitating processes aimed at the transformation of identity, ideas, and behaviors among individuals and groups within a system? (3) What are the prospects and challenges of such an approach to planning?

This qualitative study explores the contemporary case of the Juvenile Detention Alternatives Initiative (JDAI), a cross-sector social planning initiative that aims to transform the juvenile justice system using detention reform as a starting point. Since 1992, the initiative has been implemented at nearly 200 sites nationally. JDAI approaches institutional reform through a facilitated learning process designed to encourage changes in thinking, beliefs, and actions among cohorts of key decision-makers from local level juvenile justice systems.

Taking a grounded theory approach, I generate theory about the varying experiences of “cognitive conversion” among JDAI participants and these actors’ resulting actions to advance or resist the implementation of reforms. Utilizing theoretical sampling, I conducted in-depth interviews with 20 juvenile justice system collaborative
partners across 2 sites, including law enforcement, judges, probation officers, and community partners. Additional data was collected through participant observation of planning activities and meetings as well as a review of documents related to JDAI’s approach and specific institutional changes at the site level.

The cognitive focus in institutionalism as applied to this case of JDAI suggests that planners concerned with institutional change pay attention to how philosophies, practices, and theories of practice can be transformed by strategically mobilizing the social imaginary and “the release of transformative potential” (Healey 2007) among influential stakeholders. The examination of this complex process highlights considerations that include the strategic selection of planning participants, the facilitation of different pathways along which people’s ideas, identities, and roles can evolve within a field of practice, the importance of peer-to-peer learning, and the development of place-based reforms that reflect community culture and context.

References

What is the role of the community-engaged university, and planning programs specifically, in the generation of knowledge for urban development and governance? Universities increasingly define themselves as collaborative, community-engaged, and service-oriented partners in urban development and governance. The scholarship of engagement highlights important dimensions of such partnerships, including land use development capacity, relationship-building with surrounding neighborhoods, and normative, experiential education for students (Perry & Weiwel, 2005; Rodin, 2007). Planning programs have been at the forefront of this movement, often responding to the need in adjacent communities for technical assistance such as design expertise, environmental analysis and remediation, and geospatial representation; as well as process-based support such as public outreach, plan translation, and policy advocacy. In this paper, I argue that the intellectual and ideational role of the academy is increasingly, if paradoxically important for a university that aspires to take its work “into the streets” (Rodin, 2007). Drawing on the work of planning scholars concerned with resilience – a literature with which I am connected (Goldstein, Wessells, Lejano, & Butler, 2013), although not centrally involved – I take up the question posed by Simin Davoudi: how are we to develop “the capacity to imagine alternative futures” (Davoudi, 2012)(303)? I use the work of planning theorists to introduce the concept of discursive resilience, and illustrate the potentially transformative role of urban universities in its cultivation and enactment. First, I emphasize social-ecological resilience as a deeply humanist, interpretive, and context-responsive disposition, as opposed to a management outcome or set of scientific conditions to be operationalized. Second, I underscore the collaborative and communicative dimensions of social-ecological resilience, and in particular the generative characteristics of difference, uncertainty, and stress. Finally, I extend scholarship on boundary work in community-university engagement (Weerts & Sandmann, 2010), collaborative networks (Lejano & Ingram, 2009), and collaborative resilience (Quick & Feldman, 2014) to develop the post-structural and hybrid, socio-material insights of a discourse-based framework. By characterizing the university as a boundary object in networks of urban development and governance, I emphasize under-theorized aspects of its significance and potential in such
partnerships. The university is an ideational space, with the capacity to intentionally prioritize lines of inquiry, forms of training, and modes of partnership. Such practices constitute the enactment of urban development and governance discourses, where discourse is understood as not just a narrative and cognitive roadmap, but also as a performance of socio-spatial ordering replete with acceptable behaviors, enabling technologies, and prescribed intents. In its ability to convene and connect various publics, the knowledge-generation role of the community-engaged university includes the power to selectively invite, amplify, and reproduce—or to unsettle and reconstitute—shared discourses of urban development and governance.

Abstract Index #: 636

THEORY OF PLANNER AS POLITICAL LEADER

Abstract System ID#: 1167

Individual Paper

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Increasing number of literature suggest that planners need political skills to implement their planning goals. In the absence of those skills, planning theorists argue that planners are marginalized, forced to do unethical decisions, fired, and their best plans are distorted and sometimes unimplemented (Flyvbjerg, 1998; Grange, 2012; C. Hoch, 1988; C. Hoch & Cibulskis, 1987). The political skills that the planning theorists are advocating for planners is not about winning elections to be political leaders. They are advocating planners to be skillful in organizational politics within their given advisory role: staff-aides or civil-servants. Planners are advised to be accountable to the people, transparent in planning process, and responsive to political sensitivity while carrying out planning tasks (Read & Leland, 2010). Taking these ideas into considerations, planning theorists have coined a number of political roles for planners. They are planners as bureaucrats, advocates, communicators and power-players.

However, experiences show that many planners as bureaucrats, advocates and communicators were unable to influence the powerfuls and politicians adamantly pursuing vested interests (Brooks, 2002; Flyvbjerg, 1998; C. Hoch, 1988). Acting as bureaucrat insurgent or progressive civil servant was not easy by being employee of the same institution. The issues here, was not about lack of political skills, but about lack of political authority to make decisions (Brooks, 2002; Grange, 2012; C. Hoch, 1988). Planners’ dependence on politicians to make decisions, and the politicians’ denials, resistance, and distortions of facts and rationality was a big barrier to make better plans (B. Flyvbjerg, 2002). Had the planners sought for political positions and won, they would be free from political resistance and be able to deliver better planning results. This paper presents case studies from the US, Brazil and Nepal to show that the planners who joined active politics could make phenomenal contribution in planning. On this basis, it further advocates that planners should take up political position as and when possible, and acquire the power that is needed to make things happen. They need not be a prisoner of powerless, advisory-role.

By joining politics, the planner would acquire both the power of idea and the power of decision making that is required for materializing planning goals (Beckman, 1973). If one person has ‘power of knowledge’ (planner), and the other person has ‘power of decision making’(politician) then there would be a chances of disagreements on certain courses of action. But if a single person has both the power, he could make things happen as fast as he wishes to. This two-in-one role of planner-politician is a unique power to make things happen. In this case, power and rationality do not separate from each other, and fight as shown by (Flyvbjerg, 1998). Rather they unite for better change.

Having said that, this article does not expect that all planners would join politics. Cities and towns need many politically-skillful staff-aide planners, as suggested by planning theorists. By the same token, planners should not also believe that they are by default staff-aides or civil-servants, and for this reason, they should not even imagine the possibility of taking any political position. Those planners that see the probability of winning elections should join politics because doing so gives them more power (to negotiate, educate, take action and support) to implement their planning dreams. Planning theorists should admit that planner’s political-skills
without political-authority are not helpful in delivering results in many cases, and for this reason, they should stop relying only on the planner’s political-skills, and also advocate for active political role of planners.

References

Abstract Index #: 637
FROM SMART CITIES TO WISE CITIES: ECOLOGICAL WISDOM AS A NEW BASIS FOR SUSTAINABLE URBAN DEVELOPMENT
Abstract System ID#: 1204
Individual Paper

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The epochal shift to the Age of Cities is characterized by the growing global urbanized majority and the increasing material and political demands of that population within the context of ecological decline, increased resource scarcity, overburdened infrastructure, fiscal inequities, and the disruptions of climate change. This shift necessitates radically new responses from the field of city and regional planning. Researchers, corporate advocates, and policy makers have proposed Smart Cities as a response to these challenges. They describe Smart Cities as an evolutionary shift in urban infrastructure and management systems combining proliferating IT systems with the capture and analysis of the real time data they generate to inform and optimize metropolitan planning and management decision-making (Cisco Systems 2015; Hodgkinson 2011; Hitachi, 2015). The Smart Cities approach is generating significant policy and investment support and is projected to represent an infrastructure investment market exceeding $42.72 trillion by 2030 with a compound annual growth rate of 16.6 percent between 2015-2019 (Digital Journal 2015; Smart City Project 2015).

In this paper I explore Ecological Wisdom as an alternative path for sustainable urban development. Researchers describe Ecological Wisdom as a revealed property of good design requiring minimal intervention, input, and maintenance from ecological and social systems (Xiang, 2014). While Smart Cities emphasize the centrality of new, digital technology networks, Ecological Wisdom draws upon historical precedents emphasizing place-based, life-centered systems. In this article I critically contrast these two competing visions for the future of city planning.

To accomplish this I use Sir Patrick Geddes’s combined theory of civics and technics as a framework to analyze discourses associated with these divergent planning approaches (Geddes 1912; 1917). I investigate the ability of these discursive assumptions to provide sustainable solutions in the context of Riddel and Webber’s concept of wicked problems (Riddel and Webber 1973). I then explore principal case studies associated with each strategy to reflect on the type of urbanism and its consequent social and ecological relations, each path is generating.


References

Abstract Index #: 638

OCCUPY MOVEMENT AND THE ENLIGHTENMENT OF URBAN POLITICAL AWARENESS: THE CASE OF TAIWAN’S SUNFLOWER MOVEMENT, MARCH 2014
Abstract System ID#: 1226
Individual Paper
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With the expansion of contemporary capitalism and the advance of informational technology, the power of global capitalism has strongly challenged the ability of nation-state to re-distribute and re-allocate social and economic resources within its border. The Polarization of capital accumulation has made the wealth concentrate on the top 1% global elite and the rest become the victims of globalization.

Hence, since 2011, a wave of “occupy movement,” starting from Occupy Wall Street, has become a symbol and real action against global capitalism. Throughout these occupy movements, the Youth generation who has suffered from the misery of polarization of global capitalism gains a channel to voice out their angers and ideas. The mode of occupy movement takes over and even further occupies a real physical space to protest against the system itself, as dissimilar as previous social movement which often marched on the street to protest against policies or some political and/or social leaders; and connect with each other via virtual reality space, such as twitter, facebook etc.. It quickly attracts the new generation who consider themselves as the detached and apolitical generation to stand out and up to combat this uneven economic and social development. Therefore, such a new mode of social movement and its spatial strategy seems to enlighten the political awareness of a new generation.

Employing Taiwan sunflower movement as the case, the authors argue that occupation of a symbolic place and places where once were viewed as the symbol of social-political and/or economic power in the urban society would enlighten the political awareness of the participants and therefore further change the urban politics.

Abstract Index #: 639

PLANNING, DEVELOPMENT, AND MEDIATIZATION: A CASE STUDY OF MEGAPROJECT MANAGEMENT
Abstract System ID#: 1227
Individual Paper
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What messages should planners craft for the media, and for whose ends? These questions are important because media select, advance and privilege particular stories that can influence the way people think about cities and planning (Flyvbjerg 2012). Nonetheless, media are market-oriented purveyors of information, and what sells to consumers may not be the most useful information to stimulate and inform democratic discussions about cities and planning. Theorists of democratic deliberation disagree about the role that the media play and the role that the media should undertake, in social learning and ensuring informed public political judgment, largely because media content tends towards the simplistic and spectacular rather than the complex and reasoned (Meyer 2002; Allern & Blach-Østen 2014).

This article examines the tensions planners encounter when interacting with media, particularly during agonistic conflicts over development. We argue that planning occurs within the context of what political theorists refer to as a ‘mediatized politics’ in which participants perform for and message to mass audiences for both long-term, reputational ends as well as to address the demands of an immediate issue or conflict. Like many other possibilities for influence, access to media, particularly premier media outlets that command large audiences, is unequal among participants in local planning conflicts, as is the expertise necessary to frame ideas to appeal to journalists who write or broadcast for mass audiences. The question becomes how local planners enmeshed in political conflicts should proceed in democratic contexts saturated by media engagement and coverage. In the social construction of what is real and important in cities and planning, the media’s emphasis on what is entertaining, spectacular, or readily comprehended presents public deliberative decision-making, and planners who would seek to catalyze it, with both opportunities and pitfalls. Opportunities exist for professional self-promotion and marketing, while the potential pitfalls concern democratic and civic engagement.

We illustrate our broader arguments using an exemplary case in Washington, D.C. involving the Woodrow Wilson Bridge replacement. We conducted expert interviews with media professionals employed as producers, reporters, public relations specialists, editors, or journalists. We employed the casuistical methodology advocated by Thacher (2004) in this journal, which allowed us to ground the normative tensions of strong media engagement for planning within the context of a high-profile case.

References
Power is understood as a web of relationships that acts to regulate the conduct of the individuals. In this view, power does not mean constraining the individuals’ freedom, but rather, freedom is deemed as a necessary condition for exercising power.

The paper explores the concept of power by focusing on the micro relations of power in society and seeks to explain how they become condensed on the State in the form of government. The discussion on the forms of power attached to government is developed through the concept of governmentality. As advanced by Foucault, governmentality expresses the government ways of thinking and acting as an attempt to know and control individuals everyday life. As a form of power, governmentality is understood as: (1) the consolidation and proliferation of the State governance devices and (2) the development of a complex set of skills and knowledge on how to govern and exert control.

The study evaluates to what extent the participatory planning experiment in Sao Paulo was an effective mechanism for social inclusion or, if it was only a governmentalized relation directed to manipulate and control citizens. The paper is divided into two parts. The first discusses the theoretical foundations and the second evaluates Sao Paulo Planning experience.

References


Abstract Index #: 641

A PRAGMATIST MODEL OF TRANSFORMING URBAN INEQUALITIES: CREATING LIVABLE CITIES IN A TIME OF CRISIS

Abstract System ID#: 1276
Individual Paper

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Since the September 15, 2008 economic crash, the world has seen times of human suffering and uncertainty on multiple levels capital – economic, social, ecological and existential – that has led to a crisis in cities worldwide. This crisis focusing on cities has further exasperated the already widening inequalities among income groups – wealthy vs. low-income with middle class being squeezed out of the worlds’ largest cities, social capital, which enables individuals and groups to expand their horizons, ecological capital – potable water for all citizens, not just those who can purchase it, as well as clean air, accessible parks and open spaces, and existential capital, which allows for the belief in oneself. In this paper, I argue that planning scholars need to take a more nuanced analysis of inequalities in cities; present a pragmatist model of transformation that draws from Dewey, Mead, Habermas, Green, and Fung, and apply this model to these three architectures of social, built and ecological.

George Herbert Mead’s context-specific, radical transformation-focused insights about how to achieve a deeper, social democracy date from the years before the beginning of his close partnership with John Dewey. These insights include the idea that local urban activism is the most effective way to foster change. Since the early 1960s, leading urban planners, philosophers, sociologists and other political theorists have produced a considerable body of scholarship on the effectiveness of participatory and deliberative democracy as a tool for
transforming communities through empowering local civic leaders and other citizens to influence public decisions, both in the United States and in other nations. Dewey would point out that achieving this goal requires individual and civic investment in a long-term process of educating citizens in more deeply democratic habits of community living. Mead would add that it also requires adapting our existing institutions to respond to the inputs of more deeply democratic individuals and communities. This will not be easy, because empowerment changes power relations.

Important recent works in transformative social theory that combine ideas and methods from Jürgen Habermas on deliberative democracy and from John Dewey on democratic citizen participation have become effective and influential guides for scholars and activist. Over the last twenty years, considerable scholarship has focused on participatory democracy and deliberative democracy, at times using the terms interchangeably. This is not a distinction of theory versus practice.

Citizen participation beyond the franchise is not necessary for ordinary bureaucratic decision-making on matters like whether an applicant for a land use permit has submitted all necessary documents, or for ordinary representative decision-making on issues like whether to grant a variance to allow a new restaurant to use a portion of a public sidewalk for outdoor seating in a business zone in which this is already common practice. However, post-disaster contexts of deciding whether to rebuild a city neighborhood or a village park, citizen participation can contribute to social healing. In making long-range plans, including budget planning dispersed and diverse citizen embedded knowledge and values can make plans more effective as well as more achievable. In these and more ordinary kinds of planning for significant change, citizens can contribute epistemically. Moreover, their participation contributes to their education and to the emergence of new social habits in the culture, as Mead and Dewey argued. This is how real, twenty-first century people move from abstract citizenship that may mean little to them to substantial citizenship in which neighbors become real players in shaping their civic future. Democracy becomes grounded in real ways of living that shape cities in more sustainable ways through collaborative planning, and shared citizen commitment to creating livable cities through the interlinking of the social/political, built and environmental architectures.

References
Without Plan-making, and the analytic questions animating that project with be those exploring the creative and practical improvisation required of place-makers seeking to be attentive to high quality (beautiful, just, interest serving) practical (implementable, realizable) results drawing upon the best available expertise.

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Abstract Index #: 643
GLOBALIZATION AND THE CHANGING URBANISM OF WORLD CITIES: IMPLICATIONS FOR PLANNING THEORY AND PRACTICE
Abstract System ID#: 1322
Individual Paper

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Urbanism has become a fashionable term these days. In the Anglophone world the concept of urbanism that Wirth associated with population size, density, and heterogeneity in the 1930s still remains a bit of an enigma, even though the professional discourse in urban planning and design is now teeming with the term “urbanism,” shaped by various qualifiers, thus: “new urbanism,” “landscape urbanism,” “Latino urbanism,” “ecological urbanism,” “everyday urbanism,” “ethnic urbanism,” “informal urbanism,” “situational urbanism,” and even “agricultural urbanism,” oxymoronic as it may sound. But very few of them address how globalization is transforming the “urbanism” of the American cities, however it might be defined.

Most significant transformative effects of globalization, according to political theorists Savitch and Kantor (2002), can be seen in the cities that are competing in the international marketplace for global capital and investment. Shaped by global capital, deindustrialization of urban economies, de-concentration of older cities, and replacement of public realm by corporate urban development are being unleashed across cities. However, according to Pizzaro, Wei and Banerjee (2003), “agency” of capital, people, culture and information technology rather than “flows” per se refocuses the controversial effects of globalization on urbanism such as the conflicts of multiculturalism and threat of metropolitan fragmentation.

Despite Fainstein’s (2010) argument that diversity must be considered an essential construct in planning for a “just city” and the earlier works of Sandercock (1998), Qadeer, and others on planning for multicultural cities, there has been limited planning theoretic discourse. With an aim to expand this discourse, the paper will discuss four major tensions in contemporary American urbanism resulting from the agencies of globalization -- spaces of flow versus space of places (Castells 1996); spaces of hope versus spaces of despair (Harvey, ); spaces of diaspora and ethnoscapes (Appadurai, ) in a multicultural urban space (Sandercock 1998, Qadeer ); splintering urbanism (Graham and Marvin, 2001) and the resulting spaces of informality, hybridity, exclusion, and occupation (Roy 2007). These tensions correspondingly raise further questions about the scope and role of planning in the formation of a just city (Fainstein, 2000, Lefebvre, 1968) and the possibility for a cosmopolis. The paper will conclude by addressing these issues in planning practice in the context of the emergent urbanism of globalization.

References
This empirical research analyzes the process of formation of strategies such as social and discursive practices of the Federal University of Viçosa throughout its existence. We take as the main empirical investigative reality the process of formation of strategies practiced by its main social subjects based on the approach of the Strategy as Practice and so understand how the action and structures were articulated in the strategy formation process, showing where and how the activities to make strategy happen, those who performed, what skills necessary to exercise them and how they were acquired. It was possible to understand the small sets of activities performed by social subjects that somehow were responsible for the formation of organizational strategies over time.

Understanding the organizational phenomena requires practices that lead to the formation of an inter-subjective understanding and knowledge, which does not mean second, Godoi et al. (2012), the possibility to realize in our assumptions for the study execution of previous certainties questions, producing new designs. Not prescribe this work, but we share the lived experience in a systematic way, with the possibility of methodological triangulation and fostering epistemological discussion. The methodological design through documentary research, interviews in depth unstructured and focus groups combined with photo-elicitation and the non-participant observation were conducted and achieved the answers to research questions in an effort to understand the strategies and practices sóciodiscursivas formed by social subjects University under a critical approach, unveiling what is implied by the seizure of discursive practices and their meanings for teachers servers and administrative staff of the university, and thus seizing the formation of the said federal institution of higher education strategy.

References

This paper argues that “informal” practices in marginalized communities represent a “de facto” right to the city and constitute a contemporary form of social movement. The paper suggests that these practices offer an opportunity for planning to re-orient the ways by which it deals with notions of resource allocation, private and public property, and community decision-making through the lens of mutual aid, communal property, and membership networks. The paper examines practices of urban resistance embedded in the everyday life of marginalized social groups in the metropolitan area of Phoenix, Arizona. In large metropoles of the U.S. Sunbelt, such as Phoenix, the dominant urban form is inherited from the postwar period and continues to be reproduced according to the Fordist logic of standardized mass-production development. This pattern of development not only outlived the society for which it was produced, but also undermined the livability of older neighborhoods, especially in inner-ring suburbs that provide the few affordable housing options available to low-income immigrant families. The enforcement of outdated and obsolete controls over the use of space creates a climate of physical and mental incarceration in these neighborhoods. The paper focuses on resistance practices embedded in everyday life and that counter oppressive patterns of urbanization. We adapt the framework developed by James Scott in his analysis of hidden forms of resistance by peasants in developing countries (Scott 1985; 1990) and operationalize it using De Certeau’s (1984) concepts of “strategies” and “tactics” to connect the rules of planned urban form (strategies) and local responses to maneuver through them (tactics). This framework is applied to older inner-ring suburbs of the Phoenix metropolitan area and focuses on tactics that are unsanctioned and violate existing regulations. The paper synthesizes findings from the observations of over 100 such tactics and is divided into three sections. The first section describes the constraints from within which resistance emerges. Here the historical evolution of Phoenix’s social and spatial form is analyzed and illustrates a pattern marked by leapfrogging, outward expansion, relocation of jobs and services, freeway construction, and the destruction of established neighborhoods. The second section provides an ethnographic illustration of how residents of these neighborhoods, through practices embedded in their everyday lives, organically reconstitute urban spaces despite formal restrictions. These unsanctioned practices cover a wide range – from guerrilla gardening, to mobile vendors, street markets, yard sales, home businesses, and building additions. The last section situates the widespread and networked production of these tactics in the context of contemporary forms of social movements and urban resistance. Insights gained from the analysis of spaces and tactics of resistance broaden our understanding of political action in cities and especially among low-income and immigrant communities. The paper concludes by challenging mainstream views of the role of urban planning (and urban planners) and suggests avenues for progressive social change, supporting community-empowerment, and fostering endogenous political practices.

References

Track 13: Regional Planning

Abstract Index #: 646
REGIONAL GOVERNANCE: IMPACTS OF A STATE MANDATE FOR REGIONAL SUSTAINABILITY PLANNING ON LOCAL-REGIONAL COOPERATION AND IMPLEMENTATION ACTIVITIES
Abstract System ID#: 894
Individual Paper
Metropolitan Planning Organizations (MPOs) in California prepared sustainable communities strategies (SCSs) in response to the state’s land use and climate planning law, SB 375. For the first time, the SCSs tie state housing goals to regional transportation spending. Multiple actors within regions are responsible for implementing the first round SCSs. SB 375 relies on MPOs to support local changes in land use to reduce greenhouse GHG emissions. Yet in practice, congestion management agencies (CMAs) are also playing a significant part in encouraging compact land uses and housing production. For example, CMAs in the Bay Area oversee funds distributed by the region to support SCS implementation. In the Los Angeles region, CMAs are also councils of government (COGs) and have taken an active role in coordinating and supporting local climate planning efforts based on local desire to attract development activity and state planning grants. What is the gap between SCS intentions and local implementation outcomes, and what role have CMAs played in facilitating or hindering regional sustainability governance? This paper presents the results of interviews in the Bay Area and Los Angeles with local and regional actors on SCS implementation activities and the role of CMAs as an intermediary between MPO goals and the realities faced by cities. While most CMAs are supportive of regional GHG reduction goals, they also have a distinct outlook on what solutions will be effective in a local context. This paper builds on the literatures in multiscalar governance and state mandated planning (Christensen 1999; Dalton and Burby 1994) as well as past research on regional governance (Innes and Rongerude 2013; Weir, Rongerude, and Ansell 2009). It places these literatures in conversation with scholarship on sustainability planning in regions (Barbour and Deakin 2012) and at the local level (Millard-Ball 2013; Talen 2011; Wheeler 2008). Cities and CMAs are where the rubber meets the road on SCS implementation, and the results of this paper will be of interest to policymakers and regional actors trying to improve on the SCSs as they enter their second cycle, as well as to scholars who wish to understand how sustainability planning is changing regional governance.

References


Abstract Index #: 647

REINTERPRETING THE FUTURE: AN INNER-CITY EXPERIMENT WITH YOUTH JOB CREATION IN URBAN MANUFACTURING

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Cities and regions are struggling for solutions to youth unemployment. Increasingly, we find examples of experimentation to support alternative pathways into work—pathways that are less dependent on initial completion of a four-year college degree. Rising student debt, in combination with persistent and high joblessness among recent college graduates, often justifies expedited approaches to labor market transition. While formal education can certainly play a role in these alternative models, it is often embedded within the work experience itself, through structured apprenticeships, on-the-job learning, technically-oriented diplomas or
company-sponsored scholarships. Still, while the promotion of alternative qualifications and pathways are designed to quicken the pace of youth entry into regional labor markets, it is wrong to presume this is an easier, less risky and more enduring solution to career development, compared to pushing greater college attainment. In many respects, bypassing (or significantly delaying) college means a more condensed transition to work and thus increases pressure on both students and employers to demonstrate value and commitment to one another. While some skeptics might dismiss a 4-year college degree as simply a signifier of potential skill and trainability, a closer look suggests the college experience actually helps institutionalize a pathway into work by bridging current and future expectations of students and employers. Through coursework, internship programs and alumni networks, many colleges help students anticipate the work experience, at the same time that they prepare employers for engaging and incorporating a more youthful workforce.

In promoting alternatives to college, how do workforce practitioners institutionalize the transition to work for younger job seekers? What strategies do they use to more closely align the needs of prospective employers and younger labor market entrants? And what actions and supports are taken to transform an expedited pathway to work into an opportunity for future career success and mobility? This paper addresses these questions through an illustrative case study of the Austin Polytechnical Academy (APA). APA is a public high school based in a low-income, predominately African American neighborhood on the West side of Chicago. Launched in 2005, APA’s Manufacturing Connect program helps students and graduates prepare for and secure quality jobs in urban manufacturing firms. A central aim is both to educate high school students (and also their parents) about rewarding careers in manufacturing and provide them with the foundational skills and tools to embark on manufacturing careers post-graduation. But APA’s Manufacturing Connect program is not simply preparing Chicago’s next generation manufacturing workforce. Intentionally modeled as a workforce intermediary and therefore ‘dual-customer’ in approach, Manufacturing Connect is also designed to engage local employers in ways that shift perceptions of inner-city youth and their potential contribution to industry innovation and survival. Additionally, they work closely with employers to identify and resolve gaps in human resource strategies that can undermine the ability of firms to recruit and retain APA graduates.

After a brief review of existing writings on workforce intermediation and strategies of skill reinterpretation to promote youth employment, we turn to the specifics of the Manufacturing Connect program, including its institutional link to earlier programs in support of Chicago’s manufacturing renaissance. We conclude by arguing that Manufacturing Connect is not simply an innovative model for mediating the relationship between worker and employer, but also the relationship in time. In essence, Manufacturing Connect helps both employers and young workers make the conceptual leap between current and future needs and expectations. That is to say, they are helping both groups reinterpret actions today as investments for the future.

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In recent years, scholars and policy advocates have sought to move the discourse about the revitalization of U.S. manufacturing away from a narrow focus on innovation and output growth and toward a more inclusive framework that emphasizes employment, and production-related jobs in particular, as key outcomes. Yet empirical research on what Jennifer Clark (2013) calls “working regions” – where innovation and advanced manufacturing production co-exist in mutually supportive ways – has been mostly limited to case-oriented analyses that have often suffered from the tendency to “look under the lamp light” for successful cases. While useful for highlighting causal mechanisms at work, these intensive modes of analysis are inherently limited in their ability to track broader patterns of correlative relationships, and importantly, to highlight cases that are potentially revelatory but might otherwise go undetected and unstudied (Benner and Pastor 2012).

In this paper we address this gap by assessing variation in U.S. regional innovation capacity and its relationship to regional manufacturing and development outcomes across two recent periods: the early-mid 2000s (2000-07) and the post-Great Recession period (2008-12). Building on the approach taken by Doussard and Schrock (2015), we develop and test multivariate statistical models relating measures of regional innovation activity and outcomes – such as STEM-related occupational employment, patent activity, federally-funded research – against an array of regional development outcomes, including overall employment growth and manufacturing growth. Our data for this analysis draws primarily from the Census Bureau’s American Community Survey Public Use Microdata Series (PUMS), which allow us to capture regional industrial and occupational employment specializations; we augment this with innovation metrics drawn from a variety of federal data sources.

Our analysis yields several important insights, both for deciphering the changing landscape of U.S. regional innovation and manufacturing economies as well as for further scholarship. We show that the relationship between innovation and production has grown stronger overall in recent years, but that this relationship varies to some extent across technology sectors (e.g., computers versus biopharma). While our models are statistically significant overall, we find that they alternately over- and under-predict employment outcomes for many regions. Rather than treating this as a shortcoming of the modeling approach, we use this as the basis for subsequent analysis, by clustering regions based on three categories: “thin innovation” regions with high innovation but low employment growth (i.e., overpredicted by the model); “production platform” regions with low innovation but high production employment growth (i.e., underpredicted); and finally, “working regions” with strong growth in both design and production activities. Our model results will inform subsequent case-based and extensive research focused on the role of regional institutional intermediaries – for innovation, supply chain, and workforce development – in shaping the relationship between regional innovation and manufacturing growth outcomes (Clark 2014).

References

Abstract Index #: 649
AN IMPACT ANALYSIS OF A RAIL FREIGHT RATE INCREASE ON REGIONAL ECONOMY AND ENVIRONMENTAL QUALITY: THE CASE OF MULTI-REGIONS IN KOREA
Abstract System ID#: 235
Individual Paper

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It is generally believed that there exists a trade-off between environmental quality and economic efficiency. That is to say, a policy that attempts to enhance environmental quality tends to result in economic inefficiency. However, this perception may not apply to government-owned enterprises in Korea, specifically Korail which is a national railroad corporation. Korail is a typical government-owned enterprise and its inherent role is to provide the public with fast and environmentally sustainable rail transportation services at a low cost.

Recently, Korail announced a policy that raises rail freight rates by 10-15% in order to overcome its financial deficit operation. When this policy goes into effect, experts anticipate the prices of commodities will rise due to the increase in transportation costs. Consequently, it is expected that the demand for rail transportation will decrease. Furthermore, environmental quality is expected to be negatively impacted since more pollutants are generated. This is particularly case with air pollution resulting from the shift in demand from rail to other transportation modes including road and marine transportation. Needless to say, the Korail's new policy is considered inappropriate both economically and environmentally.

This paper attempts to analyze the impacts of the aforementioned policy on Korea's multi-regional economies and on environmental quality. The policy is analyzed in terms of three impacts: i) on regional economies, ii) on modal split, and iii) on CO2 emission. A multi-region prices input-output model is employed for the analysis. The paper specifically analyses the impacts of the policy on the economy and on the environmental quality. Moreover, the paper reveals that there is no trade-off between environmental quality and economic efficiency in case of the Korail. In other words, the policy will amount to a lose-lose situation as opposed to win-win. Finally, the paper suggests a policy direction for the government-owned enterprise (Korail), based on the results obtained.

Abstract Index #: 650

GROWTH AND EQUITY BENEFITS OF INCLUSIVE INNOVATION: COMPARING BIOPHARMACEUTICALS IN NORTH CAROLINA AND PENNSYLVANIA 2000-2010

Abstract System ID#: 251
Pre-organized Session: Inclusive Innovation

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Although biopharmaceuticals is one of the most heavily-studied industries in the regional policy field, few scholars have examined manufacturing policy for the sector. In many ways, an emphasis on the laboratory over the shop floor is understandable; biopharmaceuticals is fundamentally science-driven, and the translation of knowledge from basic research through the development and commercialization of drugs and therapeutics is of great interest to those who study the innovation process. Cultivating and securing bio-manufacturing jobs in addition to bio-research jobs, however, holds out the possibility that bioscience-specialized regions can pursue equity goals through diverse employment opportunities as they remain on the cutting edge of innovation. Combined with investments in vocational training institutions, including community colleges, the project of recruiting pharmaceutical manufacturers and encouraging them to tightly couple research and production activities (as well as giving research-focused operations incentives to undertake manufacturing) can result in the growth of high-paying employment for moderately educated workers.

This paper demonstrates the potential for regional institutional action to encourage research and production-related employment growth in tandem by comparing policies and trends in North Carolina -- which experienced a 23.5% growth rate in bioscience employment between 2001 and 2010 -- with Pennsylvania, a traditional bio-
pharma stronghold that experienced a 4.9% decline during the same period. We show that the North Carolina Biotechnology Center (Biotech Center), a quasi-public, state-funded organization, convinced pharmaceutical companies to build both production and research capacity in the state, while helping homegrown bioresearch establishments to move into production and to better connect production and R&D capabilities. This has yielded high paying jobs for recent university graduates; equally important, it has helped pull down the bioscience career ladder so that it now includes “rungs” for those with modest technical training beyond secondary education (Lowe 2007, 2014). By contrast, while Pennsylvania possesses path-dependent advantages as a biopharmaceutical hub, it has neither a sector-focused entity with the capacity of the North Carolina Biotechnology Center nor a commitment to the complementarity of research and production in biopharmaceuticals. Policymakers in Pennsylvania are heavily focused on nurturing research and commercialization partnerships, attracting and providing venture funding to start-ups at critical junctures, and training high-level scientists and laboratory technicians. They do not think of the state’s traditional strengths in manufacturing as an asset to the retention, growth, or attraction of bioscience enterprises, and their policy practices reflect this discounting of production’s potential (Wolf-Powers 2012).

Our research suggests that these differences in motivation and institutional capacity help to explain a divergence in outcomes for the two states over the past decade. This divergence extends beyond employment growth rates: production- and transportation-related occupations are more prevalent in North Carolina than in other biopharmaceutical-specialized states, and the occupational breakdown within biosciences is more distributed and diverse. Further, the workforce in bioscience occupations is significantly more diverse educationally in North Carolina than in Pennsylvania. Our findings lend support to two hypotheses: that co-locating biopharmaceutical R&D with manufacturing and encouraging cross-pollination between them can be a viable competitive strategy (Feldman & Ronzio 2001), and that organizing a deliberate policy strategy around the linkage of research and production can function as pro-equity policy in addition to spurring regional growth (Clark 2013).

References

There have been many studies on the relationship between urban form, household (or travelers) characteristics and Vehicle Miles Traveled (VMT), which could effect on the overall traffic pattern and sustainable development issues in a region. Such studies show how the urban shape and distribution of urban functions (like population), relate to VMT. Early studies tried to explain the influence over VMT by fundamental demographic characteristics such as the area-wide population density, and household characteristics such as household income level and car ownership (Dunphy & Fisher, 1996; Brownstone, 2008). More recent studies have conducted research on various aspects of urban characteristics. For instance, they have analyzed the relationship between VMT and distribution of population and built environment, job-housing proximity, proximity to commercial facilities from housing and other urban functions (Lee, 2012).
However, most studies have been limited to using specific one-year data during a particular year, although they used a number of urban area samples. Those studies could easily explain the influence of urban form and household characteristics on VMT using current conditions of those regions. But those studies have had lower utility because of the many unknown factors affecting VMT apart from the explanatory variables.

The purposes of this study are to minimize bias generated from one-time regional data with two different time data, and to maximize the description of the relationship between urban form, household characteristics and VMT. The fundamental concept of this study is comparing and tracking the demographic and geographic characteristics at two different time points of the same regions. The differences in characteristics will be reproduced as a new dataset to explain the relationships.

This study will use and compare demographical and geographical characteristics (which can be called urban form factors) in 2000 and 2010 as the independent variables for 30 urbanized areas. In addition, VMTs in 2000 and 2010 will be used as the dependent variable. The ten-year differences of population density, population distribution, car ownership, transit usage, centrality, etc. will be analyzed.

It is also known that the size of an urban area affects VMT (Shim, Rhee, Ahn, & Chung, 2006). Thus this study primarily focuses on the mid-size urban areas to control for geographical size. In addition, most previous studies have used the census tract, TAZ, or zip code as data source. This practice may result in low reliability because those geographical units are relatively big. The analysis of this study will be performed based on census-block and census-block-group data in order to increase the reliability of the results.

This empirical study will result in more precise analyses of the effects of urban form and household characteristics on the VMT in the study areas. In addition, the study results will be usable in practical planning processes concerned with three aspects. First, it will predict overall passenger traffic levels (VMT) needed for regional development planning. Second, since this method makes it possible to predict changes in VMT, it is possible to predict the resulting level of greenhouse gases and vehicle exhaust gases. Finally, it will be possible to predict changes in VMT caused by individual development plans based on variables such as population allocation.

References

Abstract Index #: 652
URBAN INDUSTRIAL LAND RENEWAL POLICY AND IMPLEMENTATION MECHANISM RESEARCH OF THE PEARL RIVER DELTA REGION – TAKING THE INDUSTRIAL LAND RENEWAL OF GUANGZHOU AND SHENZHEN AS THE EXAMPLE
Abstract System ID#: 326
Individual Paper

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The Pearl River Delta region is the forefront of reform and opening up in China, where two large cities - Guangzhou and Shenzhen have been gradually facing the problem of limited land use scale for urban development in the twenty-first century. In order to tap the potential from the existing land, the two local governments have promulgated policy documents to guide the urban land renewal transformation since the Year
2000, which has a high degree of fit with the current national new urbanization policy. The paper selects the industrial land renewal projects in Guangzhou and Shenzhen for empirical case research, and evaluates and compares the space performance before and after the renewal by field investigation, quantitative analysis of statistic data, spatial analysis and other methods. Meanwhile, it analyzes and compares the key clauses concerning benefit distribution plan and distribution mechanism of industrial land renewal projects by reorganizing the policy documents (including ordinances, regulations, measures) related to urban renewal promulgated after the Year 2000 of the two cities and combining with the planning process of specific projects. Based on the above research, the paper applies the planning research method of combining policy analysis and spatial analysis for the comparison between renewal policy mechanisms of the two cities, and reveals the mechanism of policy implementation through the evolution of the space layout and structure during the industrial land renewal. Finally, it points out that there are different urban renewal policy systems under the same background between Guangzhou and Shenzhen, and there are also differences between their corresponding local space governance mechanism; but from the view of long-term urban development and spatial justice, the two cities are both in an economic interest balancing stage realizing local urban renewal, and have not yet reached the stage of evaluating specific projects from the overall urban spatial equity.

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INTENSIFICATION TRAJECTORIES IN CANADIAN AND AMERICAN CITIES

Contemporary planning policy views the intensification, or infill and redevelopment, of existing urbanized areas as an important planning goal. Substantial sums of public and private money are spent on the replacement and expansion of infrastructure systems and facilities in order to attract private investment in the construction and renovation of new buildings and amenities. Implicit in this assumption is that physical intensification -- the construction of additional housing units -- will lead to an increase in the number of residents consuming local public and private services. This may not in fact be the case. Long-term decline in average household size means that fewer people occupy the same number of dwellings. To “break even” -- in other words, to maintain the population of established urban areas -- therefore requires an increase in the number of dwellings, while population growth would require the construction of even more units.

To examine the long-term impact of this phenomenon in American and Canadian cities between 1970 and 2010, I analyzed census data for all metropolitan areas of over 200,000 residents in 1970. (U.S. census tract data were obtained from private data vendor Geolytics, which has produced population and dwelling counts for each census year within 2010 boundaries. Equivalent Canadian data were drawn from government sources.) Each metropolitan area was divided into zones that were predominantly built out in the pre-1945, early postwar (1945-70), and post-1970 periods. For the first two zones in each metropolitan area, I first quantified population and dwelling unit gain or loss in each intercensal period. I then calculate the “break-even” amount for each zone.
in each decade -- how many dwellings would have had to have been constructed to compensate for decline in average household size. Finally, I show which metropolitan areas broke even, which did not, and by how much. I conclude that Canadian metropolitan areas were much more likely to break even than American ones, especially in their pre-1945 zones. This may be the result of stricter regulatory limits on outer suburban expansion.

This large-N study expands on an exploratory study of urban growth patterns in four Canadian cities (Taylor et al. 2014) and supplements other large-N longitudinal studies of metropolitan-scale urban development patterns that focus on density and suburban land consumption (e.g. Paulsen 2014; Lopez & Hynes 2003).

References


Abstract Index #: 654

REGIONAL INEQUALITY OF LOCAL FISCAL EFFORT: THE IMPORTANCE OF STATE POLICY

Abstract System ID#: 403
Pre-organized Session: Understanding Urban Austerity – Fiscal Crisis and the Role of the State

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Decentralization has increased city reliance on locally raised revenue to provide basic social, infrastructural and economic development services. With growing obligations for redistributive expenditure and fiscal stress on local government, it is especially important to examine how local fiscal effort varies under a system of decentralization and austerity. Due to disparities between local need and capacity, the landscape for local government fiscal effort is diverse and spatially unequal. State policy through state aid and state fiscal decentralization may promote regional equity, or through limitations on fiscal effort, may worsen local fiscal inequality. The fiscal behaviors of both local and state, and their interactions, have impacts on local service provision and economic growth.

This research conducts a study of local government fiscal effort of all county areas in the continental United States using panel data from 2002 to 2012 to assess how local fiscal effort has functioned and responded to the challenge of decentralization and austerity. Particular attention is given to the impacts of state fiscal policy on local fiscal effort. Multilevel regression models are used to control for state effects. Spatial regression models are also employed to correct for spatial autocorrelation. We also conduct geographically weighted regression (GWR) to understand the geographic diversity of local effort functions, and spatially varied impacts of state policies across counties.

Our models show local effort is driven primarily by local need, not growth. The increased redistributive expenditure limits local budget for economic development. Local fiscal stress is in the counties with greatest need. Nonmetropolitan nonadjacent rural areas and inner ring suburbs exhibit higher local effort while metropolitan outlying areas have lower effort. This raises spatial inequality concerns for planners. We find state policy is especially important in addressing local fiscal inequality. State centralization of expenditure obligation for localities has functioned primarily as a substitute, helping relieve local fiscal stress; while state aid ironically, promotes local competition for grants, causing greater local effort. GWR models unfold the impacts of state policy across space and demonstrate positive and negative effects on local effort depending on county type and location. Planners should give more attention to the structure of state aid and state centralization to ensure that both redistributive and developmental expenditures can be maintained under decentralization, especially for rural and inner ring suburban counties.
The metropolis or metropolitan region appears to be on the crest of a scholarly and policy wave. Janssen-Jansen and Hutton (2011) write: “in an increasingly globalizing world, the status of being a metropolis seem to be attractive and perhaps even a necessity”. Miller and Fox have a new book – “Governing the Metropolitan Region-America’s New Frontier” (emphasis added). To quote from Katz and Bradley, (2013) “(T)he metropolis is humanity’s greatest collective act of invention and imagination. Our cities and metropolitan areas—and the networks of individuals and institutions who lead them—are charting a new path forward and leading what is, in essence, an affirmative campaign for national renewal”. And Katz and Moro write: “going forward, moreover, U.S. economic policy and implementation will be increasingly ’co-developed’ with cities, counties, metropolitan economic organizations, state governments, and the private sector”. Is this breathless rhetoric backed up by reality? What is happening on the ground?

With a focus on local economic development and spatial strategy and drawing on three metropolitan regions in different continents: Detroit, Michigan, USA; the Ruhr, North Rhine-Westphalia, Germany; and Melbourne, State of Victoria, Australia, this paper seeks to address four questions: [1] How has metropolitan governance evolved in these three urban regions in the past forty years? [2] Is there evidence that Katz and Moro’s “co-development” concept has taken root in these spaces? [3] What and/or who are the contemporary drivers of metro-scale economic and spatial policy? [4] Do these cases studies illustrate effective metropolitan strategic economic development planning and management and what lessons can be drawn for policy exchange with other metros.

References

While it is assumed that climate change has far-reaching impacts on every individual in a society, the degree of influence of climate change experienced by individuals is discriminatory. Individuals who experience particularly heavy damage on climate change can be defined as vulnerable classes and the vulnerability have a functional relationship with an exposure to climate change, a sensitivity, and an adaptive capacity of individual. In this context, previous studies draw children, elderly, disabled, and low-income group as vulnerable classes of climate change, since these individuals are generally inferior in terms of biological adaptability, as well as socioeconomic status. However, considering the fact that these classifications of climate change vulnerable class overlook what people really do as a part of their daily economic activity, the limitation of previous approaches is substantial.

To complement previous limitation, this study attempts to explore vulnerable groups in terms of health and safety, and their spatial distributions based on individual characteristics of economic activities. The "occupation" performs a central role in this study as a representative measure of individual economic activities. Where the linkage between the occupation and the climate change vulnerability made are three points; 1) People who are engaged in a same occupation, share similar characteristics on working time and place of work which have a direct relationship with the level of exposure to climate change. 2) In the same way, the same occupational group has similar characteristic on the sensitivity to climate change measured by risks factors of occupation, as well as 3) the adaptive capacity which can be measured by employment conditions, such as monthly wage and educational attainment, in common.

Considering that there is a lack of reference studies, we take a data-driven approach employing the Korea Working Condition Survey (KWCS) data. The analysis process is composed of two steps. In the first step, we identify vulnerable occupations, those with relatively negative anticipated outcomes on health and safety. We draw a vulnerability index of the individual occupation's characteristics – working time and place of work, physical risk factors, and employment conditions of occupation – and identify the vulnerable occupations by selecting occupations with an index that is lower than 25% on at least two occupational characteristics. Through this process, we finally identify 27 occupations as vulnerable, which correspond to 16.5 percent of the total number of occupations. At the second step, we explore a spatial distribution of occupations vulnerable to climate change. As an exploratory spatial data analysis method, Local Moran’s I index was investigated. Through the results, we find that there are spatial clusters of vulnerable occupations well matched with economically less favored regions in Korea.
as a framework for transportation planning. This position has grown out of a perceived tendency for federally mandated long-range transportation plans (LRTPs) to focus exclusively on mobility, i.e. the ease of travelling farther and faster via an ever-expanding network of roadways and transit routes. Because the concept of accessibility incorporates both mobility and land use (proximity), it has been posited as the logical end goal of a transportation network. The asserted benefits of using an accessibility framework include planning outcomes that succeed in reducing vehicle travel and associated impacts on energy consumption, air quality, and societal and personal costs. Despite these purported advantages, the adoption of an accessibility framework by transportation planning agencies has been slow.

This study assesses the current state of accessibility in planning practice. The study presents a content analysis of 42 long-range transportation plans recently adopted by metropolitan planning organizations from a representative range of U.S. metropolitan areas. The analysis tests the degree to which the plans incorporate accessibility-related planning goals, use accessibility as a criterion for selecting transportation projects, and employ accessibility as a measurement of plan effectiveness. The resulting index shows the current state of practice in the United States by quantifying how the components of each LRTP contribute to an overall focus on accessibility. Taking this a step further, we isolate the metropolitan-area characteristics that are most useful in predicting performance on the accessibility index using a multivariate regression tree that groups and classifies MPOs by reducing variance among key variables. Accessibility orientation also is linked to planning outcomes, namely vehicle miles traveled, through the use of a structural equation model that quantifies the influence of accessibility along multiple causal pathways while controlling for potentially confounding variables.

The results of the content analysis show that, while accessibility continues to lag behind other planning concepts, some MPOs are starting to advance accessibility-based themes in their transportation plans, particularly those from larger population metro areas. The regression tree analysis reveals other key predictors of high accessibility index scores, including per capita income within the MPO service area, per capita lane miles, and per capita VMT. Predictors of lower accessibility index scores include per capita transit revenue miles, and the location of the MPO as defined by U.S. Census region. Finally, structural equation model results indicate a strong relationship between an LRTP’s accessibility orientation and per capita VMT within the MPO service area along multiple pathways. These results provide a snapshot of the state of practice among American MPOs. They also suggest that focusing LRTPs on improving accessibility (rather than on mobility exclusively) may reduce VMT, greenhouse gas emissions, roadway infrastructure expenditures, and facilitate other planning goals. Furthermore, the results begin to chart a path for achieving these goals by highlighting metros that score highly on the accessibility index and identifying variables that predict performance. The study is the first to take a systematic approach to analyzing the accessibility-related content of regional transportation plans, and the experience of these MPOs could inform implementation of anticipated new performance-based planning regulations based on the federal surface transportation act, Moving Ahead for Progress in the 21st Century.

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Within rural planning scholarship, there have historically been two distinct areas of research, each targeting a different “rural America” (Daniels and Lapping 1996). The first rural America includes communities at the metropolitan fringe that wish to remain rural in the face of urbanization pressures, where planning efforts largely revolve around land use policies that discourage development. While more broadly known as growth management, in agricultural communities such goals are referred to as “farmland preservation.” The second rural America is comprised of more remote places where the population is declining, and where planning efforts have focused on rural economic development and small town revitalization. Even in remote places where agriculture predominates, planning policies to counteract out-migration are not referred to as “farmland preservation” within planning scholarship.
In practice, though, do rural communities make such distinctions? This paper draws upon qualitative data from interviews with 20+ elected officials and planning commission chairpersons in rural jurisdictions across Michigan with stagnant or declining populations. The paper further contextualizes these interviews with US Census and USDA Census of Agriculture data, as well as content drawn from each jurisdiction’s Master Plan.

The paper finds that even in communities where the most pressing concerns of local officials are related to an aging population and youth flight, “farmland preservation” is still a term which resonates with interviewees and that is commonly used within their master plans. Interview data shows that local officials define farmland preservation not as preventing urbanization, but convincing a younger generation to take up farming, thus keeping the land within the family rather than selling it to a non-related neighboring farmer. Further, while these officials aim to achieve their vision of “farmland preservation” by increasing local economic opportunities as is recommended in the planning literature for remote rural communities, they aim to do so not through traditional economic development policy but through land use policy, minimizing restrictions on how landowners can use their property to allow entrepreneurial landowners to diversify farm income streams.

Such a finding not only blurs the lines about the differentiation between the “two rural Americas,” but invites conversation about whether there are tools that might be appropriate for both. It also invites rural planning scholars to take a fresh look at how rural communities are framing their planning goals and adapting planning tools to fit their local context.

References

Abstract Index #: 659
ECOLOGICAL AND ECONOMICAL COOPERATIVE DEVELOPMENT OF CITY-CLUSTERS AT THE URBANIZATION RATIO OVER 50%

Abstract System ID#: 631
Individual Paper

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The 21 century is an urban century. Since 2010, over half the world’s populations are living in urban areas. This trend will continue: the urbanization rate will reach 60% by 2030 and 70% by 2050. Urbanization, as a natural consequence of urban development, can generate economic growth and national prosperity, but meanwhile, can also lead to social instability and environmental destruction.

After an overall survey on the history of the regional development in the urbanization process of cities in Yangtze River Delta in China the paper reveals the fact that cities in this region have entered the stage of fast development of inter-city coordination and the rapid expansion of urban space when this region strides over the urbanization ratio of 50% (in 2000). Although this region had not been exposed to the cultural environment of and strong institutional support for inter-city coordination in the long history, the inter-city coordination has been realized through joint environment governance, joint infrastructure construction, joint land use and development, and regional knowledge innovation cooperation.
Thus, the spatial features of inter-city coordination can be summarized as the following major aspects: the time-sequence that the some cities would become well-off in a faster pace than the rest and push forward the development of others; the adjacency of cities in coordinated development; and the network features caused by the coordinated development of infrastructure and knowledge innovation. The thesis reveals that, after reaching the urbanization ratio of 50%, the coordination between cities in Yangtze River Delta has evolved from the budding phase to fast development. Cities are increasingly concerned with both the integrity and differentials of urban coordination. And the spatial development of coordination has proven the trends from multi-nodes development mode to network mode with multiple layers, and from physical spatial coordination to virtual spatial coordination.

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Abstract Index #: 660
PLANNING ALONE: THE PROVISION OF LAND USE, ECONOMIC DEVELOPMENT, AND OTHER PLANNING SERVICES
Abstract System ID#: 705
Individual Paper
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Central Theme: Regional governance is an institutional arrangement that orders economic, political, environmental, and/or social policymaking across municipal boundaries. It is an attempt to bring representatives together to adopt a broader geographic and longer-term view of their own interests (Scott, 2007). Planners have long recognized that issues such as land use, transportation, environmental protection, metropolitan growth, affordable housing and economic development cannot be managed well in a fragmented region. When communities act alone, studies show that municipalities and counties face important challenges, such as capacity, coordination across a region, and the problem of spillovers and negative externalities (Pastor, Lester, & Scoggins, 2009; Warner, 2011). This increases inequity across regions and sometimes enables suburbs to shoulder a lower tax burden as they benefit from the service spillovers of urban core communities (Orfield, 2002). Norris, Phares, and Zimmerman (2009) describe a broader governance structure that would tackle issues through voluntary cooperation among major governmental and non-governmental players. Inter-municipal cooperation for and privatization of most municipal public services are well studied, but the role of planning within that sphere is not – especially outside of major metropolitan regions. In this paper, I examine the extent to which municipalities provide each of four broad planning services (comprehensive planning, land use review, affordable housing, and economic development) and the manner in which each is delivered.

Methodology and results: Every five years since 1992, local municipalities and counties have responded to a survey about the services they provide and the manner in which they are provided. For the first time in 2012, the survey included four questions about planning specific services: comprehensive planning, land use review, affordable housing, and economic development. Using this database of local governments (n=1,715), I find that a majority of local governments engage in comprehensive and economic development planning as well as land use review. Fewer than half of municipalities and counties undertake affordable housing planning. Second, most local governments in the United States engage in planning efforts on their own, despite the documented advantages
of regionalizing efforts. Cooperation between local governments is most noticeable in affordable housing planning, an issue around which one-third of places report working with other governments. Contracting out to either non-profit or for-profit organizations is very low in comprehensive planning and land use review, but higher for economic development and affordable housing. Multilevel regression models are used to examine the factors correlating to service provision, intermunicipal cooperation, and privatization. The results provide a national benchmark of planning in these four broad areas.

Relevance: For decades, planners have discussed the value of regional planning for many issues. Despite that understanding, this research finds that planners continue to limit their efforts to individual jurisdictions. More efforts need to be undertaken to break down the political, legal and institutional barriers that curtail regional planning efforts in core areas of the practice.

References


POLICY THROUGH PRACTICE: THE ROLE OF REGIONAL INTERMEDIARIES AND DISTRIBUTED NETWORKS IN INSTITUTIONAL INNOVATION AT THE CITY SCALE

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The role of institutional intermediaries in shaping regional competitiveness is not a new subject of inquiry in urban planning. Most recent theoretical turns in the discipline have emphasized the role of institutions. However, the theoretical literature has not yet led to a body of empirical work illustrating the policy implications to a broader regional planning audience with tangible examples. What becomes clear is that these intermediaries defy easy categorization and are explicitly tied to governance in city-regions.

This paper identifies three models of these emerging distributed institutional networks promoting innovative urban governance both within and outside the public sector. The first model uses philanthropic funding to seed new capacity through technical assistance and staff in city governments. The second model uses bottom-up self-organizing facilitated through loose networks of best practice exchange (civic innovation) outside the public sector. The third model uses a franchise approach to capacity development through multi-scalar coalitions.

Common among these models is the use of networked institutions to facilitate city-scale adoption of innovative practices. Common too is that these new approaches privilege cities and skip over states. They also bypass the metropolitan regionalism debates of the past and focus directly on the city as the priority space for political and economic engagement. In other words, these networked models, and particularly the emergence of new forms of “civic innovation”, indicate more that a renewed interest in urban policy. They signal a new model of governance through institutional innovation at the city scale.
The San Francisco Bay Area has been an important site for transportation justice activism and advocacy dating back at least to the construction of the Bay Area Rapid Transit (BART) system in the 1960s. Analysis at that time determined that low-income taxpayers were disproportionately subsidizing higher-income BART riders. Over the past two decades, advocates for equitable transportation funding, civil rights, and environmental justice have become increasingly active participants in the regional transportation planning process in the Bay Area. Recent lawsuits and administrative complaints have criticized an expensive airport connector project and the relative funding of rail versus local modes of transportation.

Although they wield relatively little authority in terms of funding or land use, a number of developments have made regional transportation planning agencies a sensible locus for advocacy. Specifically, the region is the geographic scale at which patterns of inequity manifest in the form of gentrification and displacement, segregation, jobs-housing imbalance, and spatial mismatch. As such, regions are the appropriate scale at which to redress these concerns. Additionally, they offer the promise of governance free from the parochial concerns of cities and counties, where the needs of real estate developers often hold inordinate sway. Finally, in California, the state’s smart growth law SB 375 endows regional agencies with additional authority vis-à-vis the coordination of land use, transportation, and housing planning. SB 375 envisions sustainable regions undergirded by smart growth principles and will likely result in increased investment in central cities; however, the law is silent on equity impacts. As a result both advocates and philanthropic organizations are seeking to ensure that SB 375’s benefits and burdens are distributed fairly across the population. Their voices are vital for elevating the consideration of equity and justice in a process in which it would otherwise be absent.

In this paper, we document the efforts of Bay Area activists over the past two decades to transcend traditional avenues for public participation at regional transportation and land use planning agencies. Whereas the regional agencies emphasize the creation of an open and inclusive public process and support the establishment of advisory committees, advocates seek to reprioritize programming and planning decisions with the goal of minimizing harm and maximizing benefits to low-income communities and communities of color. To accomplish these aims, advocates are drawing on an increasingly sophisticated toolkit composed of both interactions with the agencies during formal public participation meetings as well as traditional community organizing measures and developing their own counter-narratives using the agency’s data in partnership with academic planners working in university settings. We document advocacy efforts focused in two areas: 1) the definition of model inputs used to define alternative transportation-land use scenarios and 2) the creation of equity-oriented performance analyses that more accurately capture the impacts of plans on low-income people and people of color. Most recently, advocates have begun to incorporate traditional environmental sustainability concerns into...
their work around equity and justice, creating plans and analyses that highlight the synergies that can emerge when both outcomes are sought together.

The authors draw upon their own experiences partnering with advocates, interviews, and analyses of primary data sources including reports, memoranda, regional plans, and other correspondence to make the case that what is happening in the Bay Area represents a truly innovative instance of public participation and advocacy. We conclude by drawing general principles from the history that can inform efforts to achieve sustainable and just transportation and land use systems across the US and elsewhere.

References


Abstract Index #: 663
MAPPING THE ENTREPRENEURIAL ECOSYSTEM
Abstract System ID#: 749
Individual Paper

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Entrepreneurship has been the cornerstone of economic recovery strategies in many US cities. In order to foster growth, an increasing amount of policy and programming at the federal, state, and local levels has been focused on promoting and nurturing new businesses. Scholars have turned their attention to understanding the broader context or the entrepreneurial ecosystem that nurtures innovation and entrepreneurship. The concept of entrepreneurial ecosystems is relatively new. According to Nambison & Baron (2013), an ecosystem is "an economic community supported by a foundation of interacting organizations - the organisms of the business world". Several scholars have theorized about which components (actors, institutions and local policy conditions) are important for viable or successful ecosystems (see Isenberg 2010, Iansiti and Levien, 2004, Neck et al., 2004).

Although, both Isenberg (2010) and Wood (2012) have acknowledged the importance of the interconnectedness between components, few studies have examined these connections in a systematic way. Both the components in a given ecosystem and the nature of their connection are driven by local conditions. What is missing in the literature is a comprehensive analysis of ecosystem components, the connections between them and an understanding of how models vary across differing regional contexts.

This study has two key research questions:

1. What actors, institutions, and other stakeholders play a role in the entrepreneurial ecosystems in each region? What value is each component contributing to the system as a whole?
2. Is the current entrepreneurial ecosystem in each region meeting the specific needs of its entrepreneurs?

This research uses survey and interview data from Chicago, Pittsburgh and Richmond to build case studies which “map” the entrepreneurial ecosystems in each of those regions. Pittsburgh is heavily invested in
entrepreneurship and innovation and has devoted substantial resources to reforming its economy in an attempt to attract and grow innovation centered, medical and technology oriented firms. This case provides an interesting example of “purposeful” and intentional ecosystem development. Chicago is a second tier global city known for its intense political climate. The city boasts one of the most active entrepreneurial communities in the US particularly for minorities. Yet the Chicago entrepreneurship mentality is cutthroat competition. Understanding how these conditions manifest in resource distribution and system building among various institutions raises interesting question for the Chicago model. Richmond, Virginia is a fledgling ecosystem with an economy that has been driven largely by tobacco money and government contracts (just over 100 miles from Washington DC), this city was relatively late to join the push for actively building an entrepreneurship infrastructure and thus represents an early stage ecosystem which is still evolving.

Interview, focus group, and survey data is combined to conduct a social network analysis of the key stakeholders (individuals and institutions) and how their interactions shape the entrepreneurial ecosystem in each region. More specifically, I critically assess the value-added of each major component or stakeholder in enhancing their system’s capacity for innovation and firm growth. I also identify the core nodes of actors and identify any cliques and/or silos among stakeholders involved. Survey and interview responses are also be used to map the flow of information and resources through the system.

Understanding the various models of contemporary ecosystems could have profound implications for the ways we engage key actors, formulate local policy, and distribute important resources to maximize results.

References
decentralization contributes to local fiscal stress and may crowd out economic development activity (Xu and Warner 2015).

Cities in upstate New York, industrial powerhouses of a prior era, are now left with declining industries, decaying infrastructure, outmigration of the middle class and concentrated poverty. Despite Governor Cuomo being a former head of Housing and Urban Development under President Clinton, the state has no urban policy. Real declines in state aid to cities since the recession, a tax cap imposed in 2011 and a tax freeze passed in 2014 starve the cities of resources and force cuts to the core programs that provide the foundation for quality of life and future economic growth.

References

GLOBAL VALUE CHAINS IN STICKY PLACES: APPRENTICESHIP IN THE U.S. SOUTH

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Since at least the 1960’s, scholars have studied the effect of global trends on regional economies and the way that regional institutional structures mitigate the effects of these global trends (Campbell 2004). This paper follows in this tradition by asking how transnational firms have shaped labor market institutions in the U.S. South and Mexico, with a focus on the advent of apprenticeship programs.

Public and private actors in North America’s high-tech manufacturing clusters have implemented unique education and skill development programs that transition students from school to work in a high-tech industry. Several prominent programs utilize an apprenticeship model based on Germany’s vocational training system, prioritize partnerships between businesses and community colleges, and exclude the traditional role of labor unions. In the last five years, these programs have been integrated with pre-existing statewide registered apprenticeship programs in North Carolina and South Carolina and the national public education system in Mexico.

In this paper, I present comparative case studies on the densely clustered automotive supply chains in central Mexico and the U.S. South (clusters near Volkswagen in Chattanooga, Tennessee, and in Puebla, Puebla, Mexico) to describe how transnational firms in the North American automotive industry have designed and promoted apprenticeship programs in partnership with metropolitan and state actors. My research addresses two questions: 1) When and how do lead manufacturing firms and smaller, co-located firms in the automotive supply chain engage in regional institution building to facilitate multi-firm training models? 2) How do different models operate and why are some more widely adopted than others? This paper finds that while larger firms contribute to and benefit from apprenticeship programs, it is the smaller firms that engage with regional actors to design and develop multi-firm training programs.

Studies of labor practices in global industries in the last decade have highlighted the power of lead firms (like Volkswagen and BMW), leaving the role of smaller export-oriented firms underdeveloped. Studying supply chain and cluster dynamics in regional economies facilitates an understanding of how these actors participate in

While there seems to be a degree of convergence in the design and implementation of apprenticeship programs, the development pathways are embedded in unique regional contexts with unique regional outcomes. In addition to publicly available labor market data, state and local administrative data, and web-accessible information on firm activities, I develop each case study through a series of in-depth interviews (n~30 at each study site) that probe the various connections between firms (lead manufacturing firms and 1st tier suppliers), educational institutions (high school and community college administrators), and government agencies affecting regional governance. Direct observation of training venues, and brief, structured interviews with participants (n~30 at each study site) also contribute to a detailed understanding of the unique apprenticeship models in each industrial cluster.

In summary, I integrate the analytical power of global value chain and cluster analysis to better understand program development processes and the implications for regional planning. This paper contributes to a larger body of work regarding how local actors shape regional labor markets in the context of globalization. The contribution of export-oriented multi-national firms to public policymaking in the American South, including the diffusion and adaptation of the German apprenticeship model, may demonstrate new avenues for policy change.

References

WHY LOCAL IS NOT ENOUGH! LESSONS FROM INTERNATIONAL REGIONAL PLANNING HISTORY FOR CLIMATE CHANGE ADAPTATION PLANNING CAPACITY

In socially complex mountain systems across the Americas, indigenous peoples, migrants, and natural resource industries compete for threatened resources. The climate change adaptation management literature recognizes human vulnerability and diversity, and the need for equitable adaptation strategies (Armitage et al. 2009), but relies on earlier participatory development and conservation paradigms assumptions, assuming that decentralization of responsibility to local governments ensures inclusive participation and investment equity. UN Habitat and climate change strategy documents equate local government capacity with inclusion through participatory decision-making (2010) to presumably involve diverse citizens who depend on resources in infrastructure, and land-use decisions. However, political economists and ecologists have shown that local governments are not necessarily inclusive and equitable. Nor do they have the power and capacity to address larger-scale and complex drivers of vulnerability and conflicts between national sectorial development policies.
without institutional support (Ribot et al. 2005). Although it critical to build local government capacity meet human needs, the international focus in the adaptive management literature on “the local” and collaborative participation, ignores the lessons learned from fall and revival of regional planning in the US and from over eighty years of rural regional planning theory and practice regarding spatial equity, environmental governance and institutional coordination.

In keeping with Friedmann’s call for planners to be interdisciplinary translators, the purpose of this paper is to illustrate the importance of regional planning theory and institutions to local climate change adaptation planning in the Americas with four cases of fragmented governance in rural and peri-urban North and South America: a shared Andean páramo in Ecuador, Mexico City, northern Idaho, and rural eastern Canada. Due to their early and continued influence on international territorial and spatial practice, we draw primarily on selected works of Dennis Rondinelli, John Friedmann, and Patsy Healey to consider the role of regional planning in addressing two challenges to local capacity in these cases – including local and indigenous institutions in plans and addressing conflicts between national sectorial policies impacting water security. For example, Friedmann advised that we distinguish cultural and territorial from functional regions and suggests a regional level of investments in civil society, human needs, creative heritage, natural resources and infrastructure (Friedmann 2007). Rondinelli, McCullough and Johnson (1989) applied their historical work to develop a political economy framework for assessing strategies for equitable decentralization investments and for designing the relative national, regional, and local capacities. Based on diverse social theory, Patsy Healey suggested a microanalysis of political legitimacies for conflict management and a strategic process of institutional building that cultivates decision-making capacities across scales (2009). We conclude with how regional theory might guide future comparative research on building institutions to support local governance capacity.

References


Abstract Index #: 667

VARIETIES OF STRESS AND LOCAL RESPONSE: HOW DEMOGRAPHIC, ECONOMIC, AND FISCAL STRESS AFFECT LOCAL RESTRUCTURING

Abstract System ID#: 847

Pre-organized Session: Understanding Urban Austerity – Fiscal Crisis and the Role of the State

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With Detroit as the poster child, the capacity of cities have been questioned in the aftermath of the Great Recession. Cities have experienced decreasing tax base, federal aid (with the exception of the short-lived American Recovery and Reinvestment Act), and state aid while citizen needs have increased due to increase in unemployment and poverty. However, instead of increasing service levels to respond to increased citizen needs, local responses have focused on restructuring and austerity measures. Some examples are restructuring collective bargaining rights, decreasing public services, or decreasing investment in public infrastructure. In light of these responses, some scholars have described the emergence of an austerity machine: a coalition of state and national government actors and business and financial interests that shrink and privatize local governments. In
the austerity machine, state and national actors use devolution to push down public responsibilities while business and financial actors use their economic power to limit government regulation.

Although austerity is a global phenomenon, scholars have also emphasized the variety of local responses, such as acquiescence, resistance, or even “riding the wave.” The state rescaling literature argues that internal institutional attributes are key drivers of local responses and calls for empirical verification of the extent to which local responses follow neoliberal proscriptions. However, the state rescaling literature does not explain how internal attributes are related to different local responses and ignores the external political and economic system. Localities are embedded within an ecosystem of regional and state politics, national policies, geography, and larger demographic and market pressures. Thus the alternative responses a locality can choose depends on these constraints or sources of stress.

This paper explores how demographic, economic, and fiscal stress lead to different local responses. In particular, I highlight the role of state policies and geography that shape the context in which localities operate. Using a 2012 nationwide survey on U.S. municipalities and service delivery, the 2012 Census of Government Finance data, and the 2009-2013 American Community Survey data, I test a model of various types of stress and contextual factors leading to different restructuring behavior in a structural equation model.

The findings of this study will have practical implications for city planners that are balancing several types of internal and external stress. By clarifying the relationship among the different types of stress, I highlight the possibilities and limitations of local responses and the importance of the larger system a locality is embedded in.

References
frequencies, encompassment, exemptions, and override provisions. It is run against state rankings on
decentralization scores and indicators of economic conditions developed by other researchers. The results are
interpreted with the help of qualitative research on the policy content of decentralization as well as state aid and
mandate relief. This study extends the current literature on US tax policy by introducing a numerical ranking of
TELs that other researchers can use, and contributes to the understanding of austerity at the state-level and its
implications for other governance scales.

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Abstract Index #: 669
LESSONS ABOUT LAND USE REGIONALISM FROM TWO RUST BELT METROPOLITAN AREAS
Abstract System ID#: 951
Individual Paper

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What role does the metropolitan institutional context—including both rules and norms—play in explaining the
attitudes of local elected officials and staff planners toward intermunicipal cooperation? Studies of
intermunicipal cooperation, a key form of regional governance, often incorporate the metropolitan institutional
context but without examining its theoretical micro-foundations. This study uses original 2013-2014 survey data
from nearly 600 local officials in over 250 municipalities in two major Rust Belt metropolitan areas in Michigan—
Detroit and Grand Rapids—to explore the linkages between institutional setting and attitudes about
intermunicipal cooperation in the form of joint land use planning. The tensions between regional and local
interests tend to be especially high in Rust Belt metropolitan areas, which exhibit high levels of regional
jurisdictional fragmentation, a strong home rule tradition, fiscal strain, and persistent socioeconomic cleavages.
Hierarchical linear modeling suggests a limited and insignificant role for metropolitan level regional councils and
sub-metropolitan voluntary associations, and for past and current cooperation in other policy areas. Case studies
suggest a potentially critical but unrealized role for public entrepreneurs and third-party intervention. While the
findings can be reconciled with the existing theoretical characterization of intermunicipal cooperation as a
transaction among firm-like local governments, they also demonstrate some of the limitations of this perspective.
The study also highlights the practical difficulties of relying on state-level enabling legislation that allows purely
voluntary intermunicipal cooperation without accompanying incentives or mandates.

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As a new geography, megaregions are increasingly discussed at both academic and policy arenas, as more population and economic activities are concentrated in such large scaled regions (Ross, 2012). The importance of megaregions is increasing with its large numbers of population and economic agglomerations, and corresponding impacts on the economy, environment, and society (Ross & Woo, 2011). Although there have been a number of studies that examined the phenomena of emerging megaregions and their policy implications, further analysis and research on megaregions calls for data that do not represent traditional geographical boundaries, and for innovative methodologies that are scalable and provide relevant policy information at the micro and macro levels.

The Panama Canal is undergoing an expansion that will double its capacity by allowing larger sizes of ships to traverse the canal. The expansion is expected to be completed in 2016 and will likely cause a substantial increase in commodities transported from Asia to the eastern United States. The growing flows of commodities and truck traffic, which have been a fundamental component of contemporary changes in economic systems (Cidell, 2010; Hesse & Rodrigue, 2004), will then bring about significant impact at both the local and regional scales. It is thus critical to understand the possible magnitude of the impacts under different scenarios of the growing freight movements due to the expansion.

This paper proposes a megaregion-level methodological framework to estimate the impact of canal expansion on transportation infrastructure and economic growth in Georgia counties located in the Piedmont Atlantic Megaregion (PAM). Truck activity is tracked through GPS data linked to specific commodity flows by specific NAICS codes to estimate county-level economic impact in Georgia. Multiple sources of data were employed, including Global Positioning System (GPS) truck data, Freight Analysis Framework (FAF) data, commodity flow survey data, and IMPLAN data, to identify: (1) the port-associated truck movements; (2) the increase in commodity flows and truck movement; (3) the freight and commodity distribution at the county level; and (4) the county-level economic impact including new locations for freight traffic, employment, revenue, high-growth sectors, economic output, and value added under different scenarios due to the canal expansion. Linking freight modeling with commodity flow and economic impact analysis, this methodology not only allows us to discover the freight flows at regional and megaregional level, but also provides detailed information of local economic activities demonstrating the use of megaregion-level analysis at the local level.

References

Widening socioeconomic disparities and spatial differentiations within metropolitan areas are important policy issues for urban planners and policy makers. Many urban scholars have an interest in the balanced growth between city and suburbs in the metropolitan areas (Orfield, 1997; Rusk, 2003). Smart growth policies, including urban containment, intend to redirect potential development into existing communities. Such policies may have a positive impact to relieve socioeconomic disparity within the metropolitan areas (Lee, 2011). Some studies indicated that urban containment policies have positive associations with central city revitalization (Dawkins et al., 2003; Nelson et al., 2004). However, the relationship between metropolitan growth policies and socioeconomic disparity in the context of intra-metropolitan spatial differentiation has not been fully examined in the planning literature. This study focuses on the impact of metropolitan growth policies on the intra-metropolitan spatial differentiations and socioeconomic disparities in terms of race, income and poverty. The primary data source is the longitudinal data from the Geolytics Neighborhood Change Database (NCDB) that includes U.S. Census 1980, 1990, 2000, and 2010. This study also uses American Community Survey (ACS). For the 364 core-based metropolitan statistical areas (CBSAs), this study categorized metropolitan growth policies using a catalog of urban containment policies and statewide smart growth policies (Wassmer, 2006). Using the longitudinal U.S. Census database from 1980 to 2010, this study conducts spatial panel regression analysis. The expected results include that intra-metropolitan spatial differentiations and socioeconomic disparity have been gradually increased over time, but they are less strong in the metropolitan areas with smart growth policies. These findings should point to the potential positive impact of smart growth policies to achieve balanced growth within U.S. metropolitan areas.

References

This paper evaluates the most recent Regional Transportation Plans (RTPs) of California’s four largest Metropolitan Planning Organizations (MPOs), developed under provisions of the state’s new smart growth regional planning law (Senate Bill 375, adopted in 2008). SB 375 requires that RTPs meet state-mandated targets for reducing greenhouse gas emissions through more efficient land use and transportation patterns. These four MPOs are a useful sample for comparative study of SB 375 implementation, because although distinct in many ways, they have been treated by state agencies as a peer group in SB 375 planning, and they have long histories of bottom-up sustainability planning in their own right. These factors mean that a study of their pre- and post-SB 375 plans can indicate how and whether the law has altered the MPOs’ planning behavior in response to their varying circumstances.

The research, conducted for the California Energy Commission and my dissertation, evaluates whether the RTPs advance sustainability goals, considered along two dimensions: 1) decision-making process, and 2) plan outputs, or, in other words, the projects, programs, and policies adopted for funding and implementation. The paper first posits a set of criteria for evaluating whether and how RTPs advance sustainability goals and objectives, based on concepts and benchmarks contained in the literatures on sustainability governance and impact assessment (e.g. Meadowcroft, 2007) and sustainable transport, including sustainability performance metrics for transport (e.g. Santos et al., 2010; and Zietsman et al., 2011). Then, based on evaluation of the written record of adopted plan documents by the four MPOs, the paper considers and compares the plan processes and outputs across distinct stages (or planning elements), including initial goal-setting, public participation and stakeholder engagement, performance measurement, evaluation of policy and program options (scenario modeling and project evaluation techniques), performance aspects of adopted final plans, implementation methods, and monitoring of progress.

The paper presents both quantitative and qualitative findings. My quantitative methods include categorizing and comparing plan performance metrics selected by the MPOs, and applying Multicriteria Decisionmaking (MCDM) techniques to evaluate which modeled performance gains were maximized in their adopted plan scenarios (see e.g. Jeon et al., 2010, for an application of MCDM). My qualitative assessment includes evaluating institutional innovations adopted by the MPOs to improve plan performance, such as performance-based rewards systems for transit agencies and local governments that adopt policy measures conducive to plan goals. I focus especially on evaluating institutional innovations aimed at strengthening planning and policy connections between transportation and land use, because that is a major goal of SB 375, but also a challenging one due to the institutional governance disjunction between authority over regional transportation funding and planning (which rests with MPOs) and authority over land use (which rests with local governments). My results will be of interest to scholars of sustainable transportation and regional planning who seek to understand how to develop systematic methods for evaluating whether RTPs advance sustainability goals and objectives.

References

Abstract Index #: 673
YOUTH CLIMATE ACTIVISM: FROM SOCIAL MOVEMENT TO PLANNING INTERVENTION
Abstract System ID#: 1097
Individual Paper

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The planning profession encourages participation from multiple stakeholders, including – and sometimes, especially – young adults. Yet mixed messages about the role of young adults in politics and policy development abound in mainstream media. On the one hand, youth are portrayed as future leaders and passionate, creative thinkers; on the other, they are regarded as lazy, apathetic, and disengaged from traditional civic life.

This paper asserts that young people are making meaningful interventions into regional planning and national politics through social movements, particularly with respect to climate change policy. In Canada, the youth climate movement is notable for its criticism of the federal government’s promotion of natural resource extraction in a context of weakened environmental regulation. Since 2006, the Conservative government under Prime Minister Stephen Harper has been hostile to environmental interests, attempting to dismiss and disparage those questioning the government’s environmental, energy, and resource policies. This is a time of increased setbacks for activists, muzzling of environmental scientists, fewer “wins” for environmental groups, and mounting contentious politics around climate and energy issues. Why are some youth opting to participate in public debate now, when the costs of participation and risk to reputation appear higher than ever? Given the long-term orientation of the issues involved, how might regional planning frameworks align with the goals of the youth climate movement?

In addition to a document and media analysis, the paper is informed by semi-structured, in-depth interviews with youth climate activists across Canada, and is part of an ongoing dissertation project. For this project, youth are defined as those who are/were between 18 and 30 years of age during the 2006-2015 era. The dissertation research focuses more broadly on understanding how young individuals navigate and alter the climate movement while carving and developing their own “brand” of activism, and identifying which factors (e.g. experience, exposure and education) may influence activists’ understanding of the environment.

As such, the research engages with questions of participation, politics, and representation in the youth climate movement in Canada. Through the in-depth focus on the Canadian case study, the research will provide new insight into the way that this social movement politicizes young participants and (re)generates streams of environmental politics to encourage particular actions and repertoires of participation in the public realm. In particular, this paper will begin to identify links between social movement theory and progressive planning, by considering how the Canadian youth climate movement incorporates critical sustainability, environmental justice, and right to the city approaches. It will also identify the non-traditional ways in which youth may influence the planning process. After briefly discussing youth activists’ motivations and mobilizations, regional planning opportunities in key jurisdictions in Canada will be identified as sites of potential intervention – how the climate movement may be able to influence planning and policy “on the ground”. Preliminary investigation suggests that the local may be the scale at which policies related to transnational climate change can be most effectively implemented in the Canadian context.

References
Water and sanitation service is commonly provided to rural and peri-urban areas of developing countries through partnerships and networks that involve international agencies. However, despite funneling large sums of international and national aid, these types of organizations are rarely evaluated; evaluation methods for networks remain complex and unclear. This paper, based on my doctoral research, outlines a new framework for assessment of network governance and applies it to the case of water and sanitation provision in Tela, Honduras.

This paper builds on network governance theory to propose a new framework for the assessment of the effectiveness of Water and Sanitation Sector (WSS) governance networks in developing countries and applies it through field research in Honduras. The framework is premised on the theoretical perspective that, rather than applying different criteria for each of the network stakeholders, it is better to relate the overall performance of networks to the different phases of the policy process.

The proposed two-phase analytical method first identifies the WSS governance network, and then makes an approximation of effectiveness through a four-stage policy analysis framework. Effectiveness is evaluated with respect to both governance processes and network outputs. Performance indicators to assess the WSS governance network were specified for each of the four stages of the policy process. Twenty-three (23) indicators cover a wide range of important water issues, such as quality and availability, and also important network aspects, such as coordination capacity, conflict resolution capacity, and organizational culture. Data used include the aggregated contributions of different strategic members of the network as well as information on functions specific to the network as a whole (such as coordination or meta-governance functions); these data were compiled based on published policy documents, internal (grey) literature and interviews with key members of each organization/entity active in the network.

A finding from the research is that the water and sanitation network of the Municipality of Tela is composed of four stakeholders strictly working at the community level and four others operating at higher levels of governance. The network actively working on the long term sustainability of the water sanitation systems, the strengthening of local institutions, and fully engaged in regulating and strengthening of water boards.

In terms of the proposed methods, the research suggests that the proposed new analytical framework for the assessment of the effectiveness of WSS governance networks is a simple and useful tool that can inform decision-making. It is likely to be of use for those striving to improve water and sanitation provision through network forms of organization, particularly for the benefit of communities or society at large.

The research will be of interest to planners and researchers concerned with evaluation of complex decision-making and governance processes. It will also be of interest to those concerned with barriers to and opportunities for more equitable and efficient delivery of basic services to secondary cities of the developing world. The research advances governance network evaluation methodology. The proposed PAF assessment methodology, with its related set of customized indicators, generates important information about a little-studied but increasingly common form of service delivery. It opens up many areas for future practice and research; other governance networks can be evaluated by modifying the indicators designed for WSS in Tela or, alternatively, the WSS network can be evaluated from other perspectives, such as efficiency and gender participation.

References
The purpose of this research is to examine the regional planning process and plan that will influence future sustainable development in Southern California. In 2008, California adopted first legislation in the nation to link climate change with land use and transportation planning. Commonly called Senate Bill 375 (SB 375), the Sustainable Communities and Climate Protection Act required metropolitan planning organizations (MPOs) in the state to implement a collaborative process to prepare a Sustainable Communities Strategy (SCS) as a new element in their long-range Regional Transportation Plans (RTPs). Building upon existing local and regional efforts that encourage smart growth, the SCS integrates regional land use and transportation planning and offers regulatory incentives for new development consistent with the strategy. It is the intent of these new RTP/SCS plans to encourage compact and transit-oriented development to help the state achieve its climate policy and GHG reduction goals.

Although the metropolitan scale is the most appropriate for addressing sustainability, challenges such as inadequate regional governance and a lack of regionally-oriented inter-local cooperation continue to hinder regional approaches to sustainable development (Wheeler, 2000). This is particularly true for the Los Angeles region, which is characterized by fragmentation, strong local autonomy, and enormous diversity, in addition to being overseen by a metropolitan planning organization that lacks land use authority. In this context, cooperative approaches to planning are necessary to solve problems that cross jurisdictions (Healey, 2006). With smart growth policies encouraging cooperative regional approaches to sustainable development, it remains to be seen if new and effective forms of regional governance can be achieved in California (Barbour & Deakin, 2012). Additionally, scholars have argued that without a clear definition of sustainability, planners have often utilized the concept to preserve economic development, neglect the natural environment, and ignore social inequalities (Gunder, 2006). Indeed, sustainable development plans often place a greater emphasis on vague concepts of improving quality of life, rather than explicitly advancing equity or the conservation of natural resources (Berke & Conroy, 2003). With these issues in mind, this research examined the RTP/SCS planning process and plan for the Los Angeles region to determine the extent to which cooperative planning by diverse stakeholders advanced principles of sustainable development in the adopted plan.

Unanimously adopted in 2012 by the Southern California Association of Governments, the largest MPO in the nation, the RTP/SCS for the Los Angeles region represents the first major step towards a regional approach to sustainable planning in Southern California. Using indicators for strong sustainable development plans identified by scholars, as well as sustainable development principles identified by the United States Green Building Council, this research used content analysis to evaluate the extent to which principles of sustainable development were compromised or enhanced in the RTP/SCS. Additionally, the analysis of interviews revealed how environmental and transportation groups were able to coordinate effectively to promote a unified agenda for sustainability in the region.

In an area that faces a variety of environmental, equity, and governance challenges, as well as the need to accommodate an additional five million inhabitants by 2035, the RTP/SCS is poised to shape the future of the region in a major way. This research examines a piece of California’s unprecedented effort to address climate change through the promotion of smart growth planning at the metropolitan scale and provides planning practitioners and scholars with insights into a regional approach to sustainable development.

References
Cities across the country have undergone significant revitalization over the last twenty five years. Incomes in central cities have increased relative to the suburbs and older housing stock in central cities has become desirable (Lucy and Phillips 2006). Since the 1990s many American downtowns have gone under significant change, becoming popular destinations for young, educated, and creative workers – potentially driving economic revitalization in these areas (Birch 2005; Florida 2009). In fact Millenials state that they will choose a city to live in (typically an amenity rich vibrant city) and then find a job that fits that lifestyle (Cortright 2005).

While the apparent changing preferences of Millenials has led many policymakers to place significant optimism in the role that the generation will play in long term urban economic growth, the age cohort also faces significant economic challenges. Underemployment and unemployment have been felt acutely by Millenials (Shierholz et. al 2014). Many Millenials are pessimistic on their prospects in the economy face significant amounts of debt and have difficulty finding work that is commensurate with their education (Kaplan et. al 2014).

This begs a significant question – if Millenials are driving economic revitalization in some cities, but having challenges in the labor market, how does growth in young adults affect economic improvement in cities equally? This paper presents two models, one regression model that shows that growth in young adults is related to increases in educational attainment (and that these gains are concentrated in the central city relative to its suburbs) and a second cluster-discriminant analysis that suggests that growth in young adults has different effects on labor market outcomes depending on the demand and demographic characteristics of the labor market. Smaller, and lower gross metro product (GMP) labor markets tend to see stagnant wages but lower income inequality, while larger and higher GMP labor markets see economic growth but higher relative income inequality, worsening unemployment, and poverty.

References
Abstract System ID#: 1347
Individual Paper

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Adaptation to climate change, defined by the Intergovernmental Panel on Climate Change in (Summary for policymakers), is the process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects (IPCC WGII AR5, 2014, p.5).

A systematic incorporation of climate change concerns into formal community planning, management, and infrastructure design is nascent stage. The challenges of effective adaptation are extremely complex and likely to be politically difficult both at the local and higher levels of government, but it is at the local level where the impact of climate change is most likely to be felt and dealt with. The police and fire departments in these communities are the first responders in a crisis, and it is municipally determined urban form and transportation networks that will prevent the worst impacts of climate change (Schechtman & Brady 2013). The causes of climate change are global, but the impacts are experienced locally (IPCC 2014).

Although a number of studies of local government action have indicated that action at higher levels of government have significant impact on local capacity to manage climate change adaptation, Rosenzweig highlights that perhaps a necessary component of successful implementation of regional sustainability efforts is strong leadership from local planning offices. Initiative shown by planners, with the support of local officials, is often a prerequisite for action, especially when the issues are controversial (Rosenzweig, et al., 2011).

Efforts are needed to guide proactive adaptation actions that benefit coastal communities for present and future generations. In the real world, however, planners are alone in their innumerable daily struggles and issues related to climate change are frequently placed in the bottom of their list of priorities.

Frenchman (2000) argues that from the point of view of a practitioner who reviews hundreds of requests for planning services each year, the profession of planning is not only alive but also increasingly important to shaping urban growth and development. Planners in the United States have never had it easy (Innes, 1998). The challenge for planners, continues Innes, has grown in recent years as organized interests have increasingly become active players in planning decisions and as public trust in government has declined.

Coastal communities across the New England region and the country are facing challenges from climate change including more extreme storms, hotter and longer-lasting heat waves, more rain in winter and less in summer, as well as the slower but significant effects of sea level rise. To identify planners’ perspectives on the status of climate change adaptation at the local level, I am doing a research that was designed by verifying a lacunae in the literature related to this aspect of the planning profession. The data collection started with 15 in-person interviews with planners along the coast of Massachusetts conducted in 2011; it continued in 2014 with the conduction of 36 in-person interviews with planners still along the coast of Massachusetts in 2014 and was concluded in 2015 with the application of 100+ web-surveys with planners in small and medium coastal communities of New England (states of Connecticut, Rhode Island, Maine, New Hampshire and Massachusetts). The preliminary findings of this 3rd phase of the project (web-surveys) completed in 2015 is the subject that I would like to present at the ACSP 2015 Conference.

References

The 50th anniversary of the 1962 Highway Act passed with little notice from planning scholars, yet the passage of this legislation marked a pivotal turning point for transportation planning practice in U.S. urban regions. A key federal transportation initiative, the 1962 Act established the foundation for regional scale transportation planning in the U.S. Further, it set the stage in the latter half of the twentieth century for the institutional evolution of regional planning and processes; it “signaled...the devolution of transportation decision-making from state and federal highway engineers to local metropolitan planning agencies” (Mohl 2008, 195) and it paved the way for urban transportation planning to address a widening set of social and environmental concerns. This evolution continues today, as metropolitan planning practice continues to adapt to changing circumstances and 21st century concerns.

In the first half of the 20th century, the structure of federal transportation investment decision-making had privileged rurally-focused state highway departments as the key participant, had located spending control with those departments, and had defined potential outcomes of federal investment and its informational inputs to favor highway construction. The early 1960s marked a turning point. Motivated by longstanding calls for more regionally-scaled urban-focused entities to address metropolitan transportation, by disappointment with uneven efforts to create them, and by recent experiences with destructive state-led highway building in urban areas, the 1962 Highway Act was an important first step in structuring transportation planning and decisionmaking to consider metropolitan interests.

The 3-c policy included in the 1962 Highway Act and the regulations issued in its wake broke new ground. They made federal transportation expenditure in urban areas contingent upon a transportation planning process that involved the state and local communities and that was continuing, cooperative and comprehensive in character. The law sought to broaden participation in decision-making and to shift some control from away from state highway departments to urban officials. Specifically, Section 134 of the Act stated that the federal government would:

"not approve...any program for projects in any urban area of more than fifty thousand population unless...such projects are based on a continuing comprehensive transportation planning process carried on cooperatively by States and local communities."

Further, the law further declared it was

"...in the national interest to encourage and promote the development of transportation systems, embracing various modes of transport in a manner that will serve the States and local communities efficiently and effectively."

Only 160-words, Section 134 presented broad ideals and values for guiding federal investments in metropolitan transportation. Yet, the brief paragraph was short on executive detail and provided no operating guide for realizing the 3-c vision.
This paper considers how, over time, subsequent federal policy and regulation has elaborated the 3-c vision. Using the lens of institutional analysis and development theory, it explores how federal policy and rules over time have specified key components of the regional transportation decisionmaking arena, including include the participants involved and information used in regional transportation planning, as well as the potential outcomes of metropolitan transportation planning and the allocation of control over those outcomes (Ostrom 2005). Tracing the evolution of these components, this paper concludes that, the 1962 created a platform for urban regions to play, over time, a far larger role in transportation decisionmaking than the original law had ever suggested. It also finds the 3-c process has proven to be a versatile framework through which new planning concerns, information, and outcomes could be considered over the years, and new stakeholders included as participants.

References


Abstract Index #: 679

THE IMPACT OF SUSTAINABLE BUILDING PROJECTS ON REGIONAL GREEN ECONOMIES

As the sustainable building movement has attracted worldwide attention over the past decade, a growing amount of literature has provided evidence of the relationship between the diffusion of sustainable buildings and regional economies. Generally, these studies can be categorized into two groups, in terms of the direction of the relationship. First, several studies show that regional economic vitality positively affects the diffusion of green-certified buildings. By contrast, some initial work indicates that the proliferation of green-certified buildings promotes local economic growth by facilitating sustainable construction-related industries.

Considering the geographical boundary of analysis, the first group of studies examines the impact of regional economic conditions on the diffusion of green-certified buildings at the metro level. On the other hand, the second group of studies mostly identifies the impact of green buildings on economic growth in a specific region. In other words, these has been a lack of nationwide studies in the second group literature. In this context, the purpose of this study is to examine the impact of green building construction on regional green economies at the Metropolitan Statistical Area level in the United States.

This study hypothesizes a positive influence of green building construction on regional green industrial sectors in terms of the number of firms and jobs. Specifically, two hypotheses are tested in this study. The first hypothesis focuses on green industries only, while the second covers overall industries. By doing so, this study tests the extent to which green construction impacts regional economies. If the diffusion of green buildings is significantly associated with green economic growth, this may imply the possibility that green buildings can be used as an indicator of regional green economic growth.

References

Track 14: Transportation and Infrastructure

Social Disparities in Walking to School: Built Environment and Neighborhood Characteristics Around Elementary Schools in Washington, D.C.

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A variety of research has revealed the advantages of walkable environments. For children, walkable environments provide opportunities to walk to school, which promote regular physical activity and reduce obesity risk. However, there are some controversies about the unequal distribution of these benefits in terms of social equity. We investigated whether disadvantaged young children, such as low-income and minority elementary school students, took advantage of the built and social environments that can encourage walking to school. To reveal the social disparities in these environmental supports for walking, this study examined various factors, including the built environments and socio-demographic characteristics in neighborhoods.

The case study focused on one of the most walkable cities, Washington, D.C., (i.e., ranked 7th in the “most walkable city” by Walk Score®, 2014). In this study, the unit of analysis was divided into three units. One unit was 77 elementary school attendance boundaries of D.C., and the others were 142 buffer zones of a quarter mile and a half mile—commonly used as the distance that people are willing to walk—around the schools. By using the buffer zones, this study examined more specific built environments and neighborhood characteristics surrounding schools. To define the relationships between the proportion of the disadvantaged students in schools and surrounding built environmental conditions for walking, this study used both bivariate (correlation and t-test) and multivariate (OLS regression model) analyses. Bivariate analysis examined the ethnic and economic disparities in the benefits of built environments and neighborhood characteristics around the elementary schools. Multivariate analysis more specifies the relationship between the disadvantaged children and various factors that support walking.

This study selected various factors to determine built and social environments that promote walking. The dependent variable was the proportion of disadvantaged students, specifically from minority and low-income family, at each elementary school. Independent variables included various built environmental factors such as the Walk Score, population density, street connectivity, land-use diversity, street lights, sidewalks and the crime rate of each unit. In addition, we involved the proportion of African American and median household income level as control variables so as to identify the socio-demographic characteristics of neighborhoods.

The results of bivariate analyses showed that there is a significant disparity in the environmental support for walking. Specifically, the schools that have a large proportion of disadvantaged children have lower Walk Score and connectivity, and locate in school attendance zones with higher crime rate. Based on the analysis using both a quarter- and a half-mile buffer zones, the result showed more significant disparity in terms of Walk Score and sidewalks. However, after controlling neighborhood’s socio-demographic factors such as share of African American rate and median household income, the result of multivariate analyses found a significantly positive
relationship between proportion of disadvantaged children and the Walk Score, while the sidewalk factor still shows a negative relationship for the buffer zones.

Our results show that the surrounding neighborhoods of elementary schools in D.C. have a favorable Walk Score, but with poor sidewalk environments. Although the findings suggest that Washington D.C. has few amount of disparity in Walk Score, there are still needs of careful attention to provide more desirable social and built environments to support walking to school, such as safe neighborhoods and extended sidewalks.

For the further supplement, the future research require an individual students’ data, instead of the aggregated one. Because this study measured the reallocated social and built environmental characteristics, further study needs more detailed information of schools and children, such as children’s address.

References

Abstract Index #: 681
DOES BUS RAPID TRANSIT GENTRIFY NEIGHBORHOODS? EVIDENCE FROM LOS ANGELES
Abstract System ID#: 8
Individual Paper

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Bus Rapid Transit (BRT), mass transit that provides rail-like service on rubber tires, is gaining popularity in the US as a lower-cost transit alternative to rail. However, despite BRT’s growing popularity and previous research that finds links between rail investments, transit-oriented development (TOD) and gentrification, the effects of bus investments remain unexplored. This study examines neighborhood change around the Los Angeles Orange Line, the most heavily-ridden BRT line in the United States, between 2000 and 2012. Comparing half-mile station areas with two-mile surrounding control areas, this study finds insufficient evidence to suggest that the Orange Line is gentrifying adjacent neighborhoods; a number of contextual factors may help to explain the limited changes. However, given international BRT case studies, BRT’s potential to gentrify neighborhoods cannot be ruled out in the future or in other contexts. Therefore, cities investing in BRT should ensure place-sensitive planning to protect residents from displacement and ensure that accessibility and mobility benefits continue to be conferred upon populations who benefit most from proximal transit.

References
BIG DATA FOR INTRAMETROPOLITAN HUMAN MOVEMENT STUDIES

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Human movements at the intrametropolitan level have been a topic of lasting interest to geographers, planners, modelers and the like (Cervero 1998; Hanson and Giuliano 2004; Salas-Olmedo and Nogués 2012; Ortúzar and Willumsen 2011). Data and information from traditional sources such as field trips, interviews, archives, surveys and censuses dominate related studies. Only in recent years have passive user-generated big data such as smart card data been introduced in those studies (Tao et al. 2014; Kim et al. 2014). Existing studies based on smart card data have demonstrated that smart card data can be used to reveal the spatial-temporal dynamics of bus trips, to identify subway trip between stations and to detect zones that share trip origins or destinations in proximity. It is argued that smart card data could support evidence-based transit planning (Tao et al. 2014) and could facilitate the simultaneous discovery of zones and subway passenger movements between these zones (Kim et al. 2014). Unlike the data from traditional sources, however, there have not been standard ways to validate the quality and reliability of information derived from big data. This article argues that the theory of urban formation can be used to do the validation. In addition, the information derived from big data can be used to verify and even extend existing theories or hypotheses of urban formation. It proposes a general framework regarding how the theory of urban formation can be employed to validate information derived from smart card data and how the validated information can supplement other data to reveal spatial patterns of economic agglomeration or human settlements. Through a case study of Beijing, it demonstrates the usefulness of the framework. It also describes the bus commuters’ subcenters’ characteristics of Beijing based on smart card data.

CHARGING FOR PARKING TO FINANCE PUBLIC SERVICES

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Around the world, many low-income neighborhoods in dense cities have two serious problems: overcrowded on-street parking and undersupplied public services. This article examines a policy to address both problems: charge fair market prices for on-street parking and use the revenue to finance local public services. Our case study of a pilot program for alley improvements in Beijing found that charging for parking can easily finance major public investments. The estimated payback period for the investments in sanitation, security, landscaping, and parking regulation is less than three years. Only 35 percent of the households in the pilot program own a car, and their average annual income is almost three times the income of carless households. Charging for parking to finance public services can therefore transfer income from richer drivers to poorer nondrivers. Similar results were found for a neighborhood in New York City.

References
The construction of large-scale high-speed rail (HSR) network in China is altering the time-space relationships between cities. As a result, HSR is changing the traditional hierarchical urban system in China and regions with large-scale networks of cities are forming. At the city level, the construction of HSR new towns could contribute to rapid land use development. In this paper, we focus on the relation between HSR and land development at the city level and study how HSR is transforming cities in China through the land development process. We conduct empirical studies on all cities within the HSR-impact area, which is defined as provinces that are covered by at least one HSR line. Our sample will include cities with a HSR station and those without. The empirical model we apply will be a Difference-in-Difference model. Our first hypothesis to be tested is that HSR will facilitate the rapid land development in cities with HSR stations (i.e., through planned HSR new town surrounding the HSR station), to an extent that is faster than cities without HSR stations. Our second hypothesis is that, among cities with HSR stations, smaller cities tend to experience faster land development compared with larger cities. As evidenced in my forthcoming paper (Zhu et. al. 2015), large cities are able to carefully choose the locations of their HSR stations and thus their planned HSR new towns are often within their existing central cities. For medium to smaller cities, decentralization is often passively driven by HSR as the site selections of HSR stations are beyond their control. The long distance between the HSR new town and the existing urban center often result in leapfrog development.

This research helps to understand the relation between transportation infrastructure investment (i.e. HSR) and land use development in the Chinese context. With high-speed rail networks currently being proposed and designed to extend from Southeast China (the city of Kunming) to Southeast Asian countries such as Thailand, Vietnam, Malaysia, and Singapore, this research project will have important policy implications for the transportation planning and urban development in all countries of mainland Southeast Asia.
causal effect of the implementation of bike-sharing technology (Krizek, Handy, & Forsyth, 2009). We aim to fill an empirical gap in the literature by quantifying the effect that bike-sharing technology has on bus transit ridership through the use of a differences-in-differences research design.

Because of the way the bike-sharing system was implemented in New York City, we can treat it like a natural experiment. Citi Bike opened in parts of New York City in May 2013. It has bike stations in southern Manhattan, but no stations north of 60th Street. We use the area that received Citi Bike stations as the treatment group and the area that did not receive stations as the control group. The differences-in-differences regression allows us to isolate the effects of the introduction of bike-sharing technology from other area and time effects. This controls for differing neighborhood characteristics and for ridership trends. We find a significant decrease in bus ridership during the study period in the full model and in a variety of specifications and subsets of the data.

This finding is particularly important as the nascent bike-share system plans to expand and for planners, practitioners, and academics who need evidence-based research on the impacts of this growing technology.

Finally, finding that bike-sharing is a substitute for traditional public transportation is interesting in evaluating if these systems should be privately or publicly funded. It is our hope that this research encourages municipalities to consider more integrated financing systems that support the reality of multi-modal transportation needs (Sclar & Lönnroth, 2014).

References


INNOVATIVE APPROACHES TO TRANSPORTATION SERVICE PROVISION FOR AGING POPULATIONS RESIDING IN AREAS LACKING FIXED-ROUTE PUBLIC TRANSPORTATION SERVICE

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The availability of transportation options is particularly important to older Americans who for reasons of disability, income, or choice are not able to drive themselves. While older Americans living in metropolitan areas that provide fixed-route transit have access to public transportation to help them meet their mobility needs, nearly one out of five older adults live outside metropolitan areas and lack easy access to such transportation services. Many communities rely on paratransit services to help meet this critical transportation need; however, such services have serious limitations related to the high cost associated with providing these services, the need for users to schedule rides in advance of their actual travel, and service quality and reliability issues.
In several states, individuals and organizations have begun to experiment with innovative transportation services that seek to address the limitations of the paratransit model in communities that lack fixed-route transit services. These services range from publicly funded, quasi-formal service networks to volunteer-led organizations that rely on private donations and informal operating approaches. Other informal approaches include volunteer-led transportation linkages that operate using personal vehicles, on-call scheduling, and existing social networks to provide rides to older adults who need one. However, these services are understudied. There is a need for more information about the types of services that are provided, and there is a need for assessment about the effectiveness of their organizational structures and service delivery strategies for providing critical mobility services for the older population, the sustainability of their funding models, and the applicability of such approaches for other communities.

Through the research we address the following three questions: (1) what types of innovative transportation services exist in communities throughout the United States that are not served by traditional fixed-route transit services?; (2) how are these innovative transportation services organized, financed, and delivered by the entities that provide the services?; and (3) how are these innovative transportation services utilized by older Americans? Due to the exploratory nature of the research, a grounded theory methodology is deemed most appropriate for this primarily qualitative research as it is designed to yield themes and outcomes unique to the understudied phenomenon of innovative transportation services. The project research design encompasses a series of specific tasks, including a review of relevant literature to develop a typology of innovative service strategies, a case study of six innovative strategies identified through the literature search, and key informant interviews with two key informants associated with each of the cases. One interviewee is associated with the entity that either organizes or operates the service, and the other interviewee is associated with the user community (or an organization representing the users). The final result of the research is a set of best practices for planners and other interested professionals in the United States.

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Abstract Index #: 687
PUBLIC NEED VS. PRIVATE INTEREST: A CASE STUDY OF TRANSIT-ORIENTED DEVELOPMENT IN NORTH TEXAS REGION
Abstract System ID#: 58
Individual Paper

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Transit-oriented development (TOD) is proposed as a planning approach specifically targeting communities and development around transit station to mitigate the impact of high private auto use and to encourage increased use of non-motorized modes of travel. Major cities across the United States have proposed strategies to develop
TODs for their station area (Litman, 2012). However, the key to the success of this planning approach is the interaction of transit and the developments in the community adjoining that transit facility (station, stop, etc). While provision of transit, its location and frequency of service is a function of public decision-making (TCRP, 2002), the developments in the community is a function of planning strategy adopted by public entities (transit authority, urban planner) and motivation and interest of private developer who chose to develop the station area. Therefore, this study investigates the differences in perception and action of both public and private entities responsible for proposed and future developments in the station area.

In the North Texas Region, there are three transit agencies that serve four county area (Collin, Dallas, Denton, and Tarrant), which include the Dallas Area Rapid Transit (DART), the Fort Worth Transportation Authority (The T) and the Denton County Transportation Authority (DCTA). These agencies serve these communities through light-rail, bus systems, Para-transit, High Occupancy Vehicle lanes and ride share services and provide a combined ridership of about 115 million passenger trips in 2012 (DART, 2006).

We interviewed the public entities and private developers of ten transit stations in the North Texas region based on four major themes: (1) Lifecycle of the station; (2) Characteristics; (3) Function it serves; and (4) Externalities that affect their decision regarding the existing, proposed, and planned developments. The approach was primarily based on grounded theory and done with narrative analysis techniques on the basis of the questions asked in the semi-structured interviews. The themes were identified and explored through hermeneutic interpretation of the findings. This relates to one aspect of Grounded Theory research in which there is a constant comparison of the ideas involved in developing the theory as interpretation of the results are continually refined (Padgett, 2004). Through this, we identify the difference in perception and approach by both the stakeholders in developing the station area to be a true TOD. Content analysis of interviews were the coded to identify the challenges and opportunities across the four themes and compared across the stakeholder.

While the developers, in most instances, were in-line with the perspective of public officials about the challenges and opportunities at each station, some of their perspectives were either too visionary or driven purely by market returns. Also, the developers wanted public entities to bridge the gap between them and the community through public forums and charrettes that can make their development successful.

This study has implication for planning research and practice. While most TOD studies discuss the design and planning aspect of the development, they have ignored the process and functions that lead to build a “sustainable TOD”. This study introduces some of the challenges faced in envisioning a TOD by bringing the perspective of the demand and supply side of the developments around the station area.

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stakeholders whose involvement was grounded in a complementary model of public participation, one in which an organized community used collective action (instead of only individual expression), and worked both within and outside of the formal public involvement process to influence the design of an arterial highway in their neighborhood. This case reflects a commonplace context for public participation: residents opposing a highway expansion and the negative effects of heavy traffic in neighborhoods. The problem presented in this case is that the process for citizen involvement was not designed to fully utilize the community’s collective capacity. Three aspects of collective action—representation, the ability to shape a policy agenda, and methods of engagement—were contested in the public participation process. We argue that these conflicts around collective action in the public participation process exposed its “one-way communication,” and enabled a different kind of political process in which neighbors’ organizing was powerful and influenced decisions.

Abstract Index #: 689
SHORT-TERM, LONG-TERM, AND NON-LINEAR EFFECTS OF GASOLINE PRICES ON TRANSIT RIDERSHIP IN TEN US URBANIZED AREAS, USING FIXED EFFECTS PANEL DATA ANALYSIS
Abstract System ID#: 83
Individual Paper
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Gasoline price increases since 1999 have generated substantial discussions on how they affect people’s travel behavior. In particular, rising gasoline prices have been linked to increased demand for transit. This paper presents the second part of analysis results based on the research funded by the Mineta Transportation Institute, following up on the paper presented last year: “Fixed Effects Panel Data Analysis of Gasoline Prices, Fare, Service Supply, and Service Frequency on Transit Ridership in Ten U.S. Urbanized Areas.”

Using panel data of transit ridership and monthly gasoline prices for ten selected US urbanized areas over the period from 2003 to 2011, this study analyzes the effect of gasoline prices on ridership of the four main modes of transit—bus, light rail, heavy rail, and commuter rail—as well as their aggregate. While the previous paper focused on: (1) the treatment of endogeneity between the supply of services and ridership and (2) the effects of gasoline prices and three internal factors to transit agencies—transit fare, service supply, and service frequency—this paper examines lagged and threshold effects of gasoline prices and varying elasticity values at different gasoline prices, taking into account external factors, such as economic conditions and socio-economic characteristics of travelers.

The data for an analysis are obtained from the US Energy Information Administration, the National Transit Database of US Department of Transportation (DOT) Federal Transit Administration that provides operation and financial data for transit agencies, the American Community Survey 1-year data between 2005 and 2011 for demographic and socio-economic variables, and Highway Statistics Series from US DOT Federal Highway Administration.

The analysis results show varying values of elasticity, depending on modes and conditions. Strong evidence was found for positive elasticity for bus ridership and for ridership of all modes combined, while ones for light rail and heavy rail were inconclusive. The bus ridership elasticity was found larger in a long term than in a short term and for gasoline prices over $3 than gasoline prices below $3. The elasticity for commuter rail was found negative for gasoline prices lower than $3, while it was positive for the prices over $3, as well as for a long term.

Findings in this study have important implications for public transportation planning as the fluctuation of transit ridership due to gasoline prices can substantially affect fare revenue and the level of crowding in the transit system. A ridership increase in peak periods may require a substantial increase in service supply and even facility capacity, and pose challenges in service planning for transit agencies that are operating at the maximum supply level and experiencing overcrowding during peak-periods.
References


Abstract Index #: 690

RELATIONSHIP BETWEEN MOTORIZED TRAVEL AND TIME SPENT ONLINE FOR NON-WORK PURPOSES: AN EXAMINATION OF LOCATION IMPACT

Abstract System ID#: 89

Individual Paper

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The influences of Information and Communications Technologies (ICT) on travel behaviour have been investigated for several decades due to the potential of ICT to substitute face-to-face meetings, thus reducing traffic volumes, and thereby lowering congestion and creating sustainable communities. A body of disaggregated ICT-travel behaviour studies focused on specific ICT applications such as telecommuting or e-shopping to estimate if ICT can reduce actual physical trips or generate more interactions between people or businesses in different places, increasing travel demand (Mokhtarian and Salomon, 1997; Mokhtarian, 1998; Pendyala et al., 1991). Moreover, some studies employed complicated analytical methodologies to examine the complex relationship between the use of ICT and travel behaviour (Wang and Law, 2007; Farag et al., 2007).

Even though such studies provided valuable insights for planners, there are still many unknown connections between the use of ICT and travel behaviour because ICT are of many different types, and travel behaviour is determined with various factors and conditions. In addition, what has been the least known is whether the place matters for the connection between the use of ICT and travel behaviour. Numerous empirical studies have shown that there are significant effects of the built environment on travel behaviour and certain aspects such as compact and mixed land uses can reduce auto dependency. Moreover, ICT can potentially change people's travel patterns by improving accessibility to transport and diverse activities. Such findings imply that the attributes of a place can shape people’s decisions regarding travel, and even though the use of ICT may increase or decrease the chance of making physical trips, the intensity of such a relationship can vary according to people’s residential locations due to the different levels of accessibility to opportunities.

This study focuses on the Internet use for non-work purposes and two research questions are examined: Does the amount of time spent on the Internet affect motorized trip generation and motorized travel distance? how do these effects vary according to residential locations such as urban, town and rural areas where the levels of accessibility are different?. To examine these two research questions, 2005-6 Scottish Household Survey was used and Bayesian multilevel Poisson models and multilevel linear regressions were built.

We find there is a non-linear relationship between the amount of time spent on the Internet for personal purposes and motorized mobility, with both very low-end as well as very high-end Internet users having lower levels of motorized mobility, while moderate-intensity users having higher levels of motorized mobility. However, these effects vary according to residential location; for example, people living in urban areas have different levels
of motorized mobility according to the amount of time spent online, while no significant impact is identified for people living in rural area.

Our study implies that people living in urban areas in Scotland may use more motorized transport modes compared to the past because they could obtain rich information about diverse activities and transport through the Internet promptly. One important planning implication is that encouraging compact developments in Scotland may not reduce motorized travel as planners expect because there is a significant complementary relationship between the compactness and motorized travel with respect to the increased Internet use.

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Abstract Index #: 691

NEIGHBORHOOD CHARACTERISTICS THAT SUPPORT BICYCLE COMMUTING: ANALYSIS OF THE TOP 100 UNITED STATES CENSUS TRACTS

According to the Alliance for Walking and Bicycling (2014), 47 of the 52 largest cities in the US have established goals to increase bicycling. Communities that seek to increase bicycling often look to other cities for examples of bicycle-friendly policies, projects, and programs. For example, the League of American Bicyclists (2014) recognizes the cities of Portland, OR, Minneapolis, MN, Davis, CA, and Boulder, CO as platinum-level Bicycle-Friendly Communities. However, most cities have large variation in bicycle activity between neighborhoods. For example, both Portland, OR and Minneapolis MN contain neighborhoods with bicycle journey-to-work mode shares greater than 15% and less than one percent. Finer-grained analyses are needed to understand factors associated with bicycling. Therefore, this study uses neighborhood-level data to explore the following question: what socioeconomic and local environment characteristics are found in neighborhoods with the highest levels of bicycle commuting in the United States? The findings can provide insights into policies that may be able to increase bicycle commuting significantly in specific neighborhoods.

Some of the most commonly-cited characteristics associated with bicycling are short distances between activity locations, the presence and connectivity of bicycle facilities (e.g., bicycle lanes, multi-use trails, and cycle tracks), bicycle parking, limited automobile parking supply and high parking cost, low automobile ownership, flat terrain, and mild weather (Pucher, Dill, and Handy 2010; Heinen, van Wee, and Maat 2010). Several recent studies have focused specifically on bicycle commuting to and from work. Bicycle commuting is associated with more on-road bicycle lanes (Dill and Carr 2003), short distance to work (Buehler 2012), bicycle parking and showers at work (Buehler 2012), and paying for automobile parking at work (Buehler 2012). Socioeconomic factors associated with bicycle commuting include being male and identifying as White (Buehler 2012; Pucher, Buehler, and Seinen 2011), although bicycling is increasing among other ethnic groups (Pucher, Buehler, and Seinen 2011). An analysis of nine large North American metropolitan areas mapped bicycle commute data for sub-city areas.
(Pucher, Buehler, and Seinen 2011). These maps showed notable variation across each region, and the highest levels of bicycling were generally found in neighborhoods close to the regional central business district and close to university campuses (Pucher, Buehler, and Seinen 2011). However, few studies have focused specifically on neighborhoods with very high rates of bicycling to work.

This study identifies the 100 census tracts with the highest bicycle commute mode shares in the US (Top 100 census tracts) and pairs them with 100 other randomly-selected census tracts from the same counties (100 Comparison tracts). As a whole, the Top 100 tracts have a bicycle commute mode share of 21%. Seventy of the Top 100 tracts are in locations that have fewer than 10 days per year with high temperatures below 32°F (0°C) and 68 are within two miles (3.2 km) of a college or university campus. Seventeen have relatively low college populations and are in high-density neighborhoods close to large city central business districts. Conditional logistic regression is used to estimate the likelihood of a paired tract being the Top 100 rather than the Comparison tract. After controlling for climate and topography, being a Top 100 tract is associated with several socioeconomic and local environment characteristics, including being located closer to a university and having more households without automobiles, more people born in other states and countries, higher population density, more housing constructed before 1940, and greater bicycle facility density. The results suggest that policies to model employment centers after university campuses; design neighborhoods that support routine, multimodal travel; and reduce barriers to bicycling in bad weather may help increase neighborhood bicycle commuting.

References


DYNAMIC PARKING PRICING: EVALUATING APPROACHES TO PRICE GRANULARITY AND FREQUENCY OF ADJUSTMENT

Abstract System ID#: 107
Individual Paper

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Parking pricing is transforming transportation and district management practices. Communities that traditionally provided free public parking are beginning to charge for it, while those that have charged fixed rates are moving to systems that modify parking prices to achieve desired parking occupancies. While traditional static parking charges provide revenue and have some influence on parking locations and duration, they do not produce efficient use of parking resources because the most desirable spaces are full most of the time. This paper evaluates four west coast dynamic parking pricing projects that illustrate the range of approaches to varying parking pricing, explaining how pricing strategy should be aligned to context.

Dynamic parking pricing varies price to achieve desired parking occupancy levels. It is becoming well established and proven in practice (Shoup 2011, Pierce and Shoup 2013). Despite widespread agreement about the advantages of dynamic parking pricing, there are differences of opinion on how parking prices should be
adjusted. Conventional practice is a stable pricing scheme implemented in simple pricing zones. Adjustments require political decisions and are seldom made. This system offers drivers certainty about price but is inefficient. On the other hand, occupancy-responsive, block- and time-specific pricing can better achieve desired space occupancy targets, e.g., setting a price so one or two space always available on each blockface. These strategies usually set a schedule of prices by parking location, time of day, or day of the week. Regular, staff-driven modification of prices seek to achieve adopted occupancy goals.

This paper compares practices and results in four case studies: Los Angeles, CA, Redwood City, CA, San Francisco, CA, and Seattle, WA. We explain the pricing adjustment scheme in each locale and provide insights from interviews with local parking managers and academic and consultant evaluations. The material is organized in an outcome framework that includes: delivering targeted occupancy rates, revenues and expenditures, equipment and sensor reliability, administrative operability, parking and customer feedback, and political feasibility.

The current state of dynamic pricing practice is to make adjustments on monthly or bi-monthly basis using predefined occupancy level thresholds, either average block face occupancy or the fraction of time a block face is at defined levels. There is no evidence of a consumer or political backlash to adjustments on this frequency of adjustment, although signage explaining time-of-day prices must be clear. Evaluations show that this adjustment frequency increases the percentage of block faces meeting target occupancy levels, but there are concerns with limitations on the frequency and amount of price changes, and the impact of disabled placard abuse. While dynamic pricing is used in some off-street public parking, private off-street parking often follows its own pricing protocols, and is therefore uncoordinated with the public parking scheme.

We conclude that the level of granularity and frequency of adjustment in dynamic pricing should respond to community context. Further, promising next steps in dynamic pricing include (1) adjustments based on peak use days or periods, such as peak holiday shopping days or seasons, (2) fuller integration of public and private parking resources, (3) reforming disabled parking rules to ensure pricing effectiveness, and (4) real-time dynamic pricing in locations with advanced parking applications and parking information systems.

References

Abstract Index #: 693
AIRPORTS AND LOCAL ECONOMIC DEVELOPMENT: CAN PLANNERS SUPPORT JOB CREATION IN AIRPORT ZONES?
Abstract System ID#: 110
Individual Paper

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Many planners and local government officials consider that air traffic is essential to metropolitan areas’ economic vitality, which is certainly true in a global economy. For instance, the Metropolitan Planning Organization for Philadelphia, DVRPC, includes among its key transportation indicators the number of passenger trips taken at Philadelphia International Airport. Urban economists have recently found that air traffic has a small but significant impact on job creation, especially for services jobs at the Metropolitan Statistical Area (MSA) scale.
(Green 2007, Sheard 2014). However, the spatial distribution of these effects at a smaller scale than the MSA – primarily in areas proximate to the airport – is of concern to planners, who can play an important role in designing policies and initiatives to bolster these effects, especially job creation.

Initiatives to enhance job creation around the airport include infrastructure investments like airport capacity expansions, and various “spatial planning models of airport-driven urban development” (Freestone and Baker 2011). However, the effects of such endeavors remain understudied. In the U.S, some airports have morphed from gateways to major job centers in their own right, like the Dulles corridor or the Memphis FedEx hub, but systematic studies of airports as economic sub-centers remain scarce and contested (Appold and Kasarda 2013, Cidell 2014). Planners and policy-makers alike would benefit from more studies on the airport as employment sub-center and on the factors supporting job creation around airports, especially since these areas are often underprivileged, and since economic growth thanks to air traffic carries a heavy environmental cost.

This paper aims to fill this gap by investigating in depth the immediate surroundings of U.S. airports, which I call “airport zones”. It addresses two questions: To what extent does the presence of an airport support job creation in its immediate surroundings, i.e. the airport zones, across U.S. metropolitan areas? Do airport expansions and air traffic growth influence job creation in these airport zones?

I define airport zones by drawing concentric circles (up to a 10-kilometer radius) around airports and calculating job-density gradients using the airport as a center. Then, I build a typology of these airport zones, using cross-sectional descriptive statistics, in addition to airport (capacity, traffic, hubbing, distance to CBD...), and MSA characteristics (population size, total and sectorial employment...). Finally, I perform a fixed-effects panel data analysis, with the number of jobs in the airport zone as the dependent variable. Independent variables include air traffic (passengers and freight), capacity expansion, and existence of an airport special district. Control variables include nationwide and MSA-level GDP, as well as employment. Interviews of city officials and planners add depth to the findings and airport-specific information.

I use a relatively new dataset, the Longitudinal Employer-Household Dynamics (LEHD) data, to map jobs by sector around 42 major commercial airports located in 38 MSAs. LEHD data is available between 2002 and 2011, a period of significant airport expansions, and provides more precise granularity than Zip code Business Patterns, while not undergoing censorship for certain sectors and geographies. I have built historical air traffic data, in particular for number of destinations, thanks to the Bureau of Transportation Statistics’ T-100 dataset. Airport expansion data is available from the Federal Aviation Authority.

This research is ongoing, but a diversity of airport zones emerges, challenging general optimism of city officials for airport-based economic development across the spectrum of airports: while some airports support strong job sub-centers, others airport zones are relatively weaker with lower job density than in surrounding areas.

References


Abstract Index #: 694
EXTENSION OF MASS RAPID TRANSIT NETWORK AND RESIDENTIAL PROPERTY VALUES: EVIDENCE FROM THE OPENING OF NORTHEAST AND CIRCLE LINE IN SINGAPORE
Abstract System ID#: 137
Individual Paper

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Mass Rapid Transit (MRT) has been widely considered an efficient and environmentally friendly mode of transport to address urban transport challenges. To meet the increasing demand for travel, the Singapore Government has been continually expanding the MRT network during the past decades and plans to double the total length of MRT tracks from the current 178 km to about 360 km in 2030. The extension of MRT network in Singapore provides an ideal setting to estimate the actual impact of new transit investment on property values as a result of improved accessibility.

In this paper, we use a difference-in-differences (DID) estimator within the hedonic price modelling framework to isolate the causal effect of MRT network extension on residential property values, by comparing the transaction price “before and after” the inauguration of new MRT lines through a “treatment” group versus a “control” group. Local polynomial fitting are employed to identify the treatment zone of new MRT stations based on the network distance from transacted properties to the nearest stations. The modelling framework was applied to the opening of the Circle Line (CCL) and North East Line (NEL) in Singapore. We find that the opening of the NEL increased the value of public housing units within 800 meters of new NEL stations by between 11.1% and 13%. The opening of the CCL increased the value of private housing units within 1200 meters of new CCL stations by between 3.04% and 3.16%.

This study provides more reliable estimates of the value-added effect of transit investment compared to conventional cross-sectional hedonic price analysis and contributes to more informed policy design for value capture programs.

References


Abstract Index #: 695

THE STREETCAR RESURGENCE IN THE U.S.: TRANSIT REVOLUTION OR GROWTH-MACHINE TACTIC?

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The reinsertion of late 19th/early 20th century streetcar transit technology in many U.S. cities is one of the most remarkable transportation events of the early 21st century. Prior studies have primarily considered the streetcar’s role as a transit investment, and typically found very poor ridership results for the amount of investment being made. However, there is considerable evidence to suggest that the modern-era streetcar is primarily an economic development tool as opposed to primarily being a transportation investment, and thus it is the most recent example of a larger and older downtown re-purposing, revitalization, and redevelopment agenda.

The authors examine this proposition using a multiple case study investigation of the modern-era streetcars operated in five U.S. cities: Little Rock, Memphis, Portland, Seattle, and Tampa. Using a combination of urban planning and political-economy literature as a research framework, the authors employ a mixed-methods
research design that uses key informant interviews with more than 20 planners, developers, business leaders and other key local actors, planning and policy documents, newspaper accounts, and ridership and survey data obtained from transit agencies to identify the key events, agents, goals, and perceived outcomes associated with the streetcars implemented in each city. The authors identify similarities and differences across the cases to better understand the streetcar’s emergence as a downtown economic development tool.

The authors find that the modern-era streetcar phenomena is the latest of a series of capital-intensive, multi-decade, downtown revitalization projects initiated mostly by local private sector and led by private-public coalitions within a mixed but asymmetrical public-private investment program. As such, the implementation of modern U.S. streetcars is the most recent tactic of downtown growth-machine coalitions. In most cases the transit goal is secondary or even non-existent, with development and economic-growth purposes emerging as the dominant policy and decision-making orientation among key actors involved in each city. The perceived performance of streetcar as a development tool by local key-informants is generally good with informants pointing to its role more as a catalyst rather than a causal factor of economic development activity. These assertions are voiced despite the absence of any careful empirical study of these development effects in most cities. The modern-era streetcar’s role as symbol of downtown and key element in local city identity emerges as an additional common theme across the cases.

The authors suggest that re-framing the study of the modern-era streetcar phenomena within a political-economy discourse offers a better and more nuanced understanding of its downtown historical context, evinces the political-economic forces behind its planning and implementation, and reveals important links to its overall performance as a transit and/or development tool. These insights should better inform land-use and transportation planners, local decision-makers, and civic organizations that seek to advance sustainable transit and urban (downtown) revitalization efforts, as well as those currently considering, planning and implementing streetcars in their communities.

References

Abstract Index #: 696
CROWDSOURCED BICYCLE ROUTES: FOSTERING PLANNING FOR TRANSPORTATION JUSTICE FOR MANY, OR A SELECT FEW?
Abstract System ID#: 146
Individual Paper

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If the dictum ‘what gets measured, gets done’ is true, then planning for bicycle transport lags behind urban aspirations for livability. New technologies, such as smartphone apps tracking bicycle routes, offer a way for planners to have low-cost data crowdsourced by bicyclists themselves. But is the population of smartphone app users sufficient to improve transportation justice? Two opposing viewpoints are offered: 1) bicycle volumes taken from smartphone apps restrict contributions to a more affluent audience, and could bias transportation planning
results away from low-income communities; and 2) people who bicycle are already an under-served transportation community (Misra et al. 2014), and information from Strava, or similar apps foster more data (and better planning) from a broader group of bicyclists, regardless of income. The challenge of internet and smartphone access has been explored deeply in socio-economic studies, but its implication for transportation planning needs explicit focus. Additionally, transportation research is documenting a breadth of bicycle monitoring methods, but they still lack critical perspective on the broader issues of population representation and planning policy.

This study uses both empirical and normative approaches to evaluate the two perspectives of crowdsourced bicycle routes. First, we compare a bicyclist traffic data sample from the Strava smartphone application with actual counts of the all users at sampled locations during the same time period, and bicycle commuting statistics from the American Community Survey (ACS). We evaluate smartphone use at the national level using detailed cross tabulations obtained from the Pew Internet Project –25th Anniversary of the Web survey, in order to assess changes in smartphone adoption over time by race and income.

We evaluate the spatial correlation of commute trip origin locations reported in the Strava dataset with residential bicycle commuting responses from the ACS using geostatistics. Normative concepts of justice and public participation are evaluated through Ageyman’s just sustainability paradigm (2005), which seeks to bridge environmental justice with a sustainability discourse often lacking in equity perspective. Additionally, crowdsourced bicycle volumes are considered to the degree they could constitute public participation through Schlossberg and Shuford’s comparison of the conception of “public” in public participation geographic information systems (2005). To evaluate transportation justice with only empirical methods could lead to reductionist conclusions, so this study also uses normative frameworks of just sustainabilities and participation as well.

Crowdsourcing of planning information is increasing in planning practice, but we have few case studies from research, and scant guidance to students and practitioners for effective incorporation into planning practice. This study looks at the crowdsourcing of bicycle volumes as an example of a new dataset that can expand knowledge about bicycling in a locale, and evaluates how planners and researchers can view this type of information from a transportation justice perspective. Rather than providing conclusive statements on more equitable planning using new big data sources, this study provides signposts of early evidence useful for additional research and planning practice in transportation justice.

References


Abstract Index #: 697
IF YOU BUILD RAIL TRANSIT IN SUBURBS, WILL DEVELOPMENT COME?
Abstract System ID#: 148
Individual Paper

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This study uses longitudinal data to assess land and economic development within walking distance of rail transit stations in suburbs of Portland (Oregon) from 2004 to 2014. The study serves two research purposes by documenting and analyzing the changes of land use and employment structure in 57 rail transit station areas over a period of 10 years in suburban Portland. First, it illustrates diverse temporal and spatial patterns of transit
oriented development (TOD) in an American metropolitan area that is well known for its efforts in smart growth. Second, it explores effective planning tools that can be used to encourage TOD in American suburbs. A key question this study attempts to answer is why some suburban rail transit stations are more successful than others in promoting TOD in their surrounding areas.

To address this question, this study adopts both descriptive and modeling approaches. Using ArcGIS tools, I first calculate a set of indicators to measure different dimensions of TOD in 57 suburban rail transit station areas of eight rail transit lines in 2-year intervals between 2004 and 2014. I then calculate the changes of these indicators over time and visualize them in graphs to show their temporal and spatial dynamics. Next, I estimate mixed-effect models on the basis of a longitudinal and panel data set to analyze the changes of TOD indicators as a function of an array of variables that include zoning and land use plan, government incentives, transit ridership, the built environment, and local social-economic characteristics. The longitudinal and panel data set enables us to observe a broad cross-section of TODs over time and allows us to study the dynamics of land use and economy in suburban rail transit station areas. It also helps to address the endogeneity problem, which has been a major hindrance to studying the land use effects of transportation investment (Giuliano, 2004).

This study contributes to the literature in several ways. First, a central theme of this study is to analyze why some suburban rail transit stations are more successful than others in encouraging TOD by comparing rail transit stations that were opened at different times and in different locations. This makes it different from previous studies (e.g. Cervero and Landis, 1997) that use quasi-experimental comparisons to test whether public transit alters land development patterns by comparing transit service areas to a control group, which is notoriously difficult to find. Second, most existing work on the impacts of transit on land development has been focused on the property value effects (e.g. Knapp, Ding, and Hopkins, 2001), where data are more readily available. There are much fewer studies that directly measure longitudinal changes of land development patterns and employment structures at fine spatial scales in suburban rail transit station areas. This study partially fills this gap by analyzing a relative large sample of data for 57 stations of eight different rail transit lines over a period of 10 years. A large sample size allows us to observe a diverse topology of TOD in rail transit station areas and their temporal dynamics. Third, a recent study (Chatman and Noland, 2014) at an aggregate scale indicates that the economic benefits of transit improvement are much more prominent in central cities than in suburban areas. In this study, I focus on suburban rail transit stations, identifying policy tools and locational factors that have helped to promote TOD in suburbs.

The results of this study inform policy in at least two ways. First, by identifying effective policy tools that encourage TOD in rail transit station areas, it improves our understanding of whether and how TOD related land use policies work in the real world (Boarnet and Compin, 1999). Second, by analyzing locational and socio-economic characteristics that have helped foster TOD in station areas, it helps policymakers to make better locational and timing decisions for future rail transit projects in American suburbs.

References
ASSESSING MOBILITY OPTIONS FOR TRANSPORTATION DISADVANTAGED: A GAP ANALYSIS IN FLORIDA

Background:
The state of Florida has the highest percentage of elderly population (65+) in the nation and the numbers are projected to grow to over 27% of its population by year 2030, a wide margin compared to 19 percent national average. With older age comes the challenge of mobility dependence in later life. In addition to elderly, other disadvantaged populations such as individuals with disabilities and people who don’t own a vehicle face similar mobility limitations. These trends create an even greater impetus for development of alternative transportation options and policy and advocacy efforts to improve the safety, access, and mobility for Florida’s transportation disadvantaged.

Study Design:
In order to ensure transportation that meets a variety of individual needs and circumstances, a continuum of transportation is required. Toward the aims of informing policy and provision of alternative mobility options to meet the changing needs of Florida’s transportation disadvantaged, this study looks at analysis methods that incorporate Geographic Information Systems (GIS) to assess the existing network of alternative transportation and to identify broad gaps in the service availability for seniors, people with disabilities, and people without access to automobile. Based on these three disadvantaged populations, we investigate service availability at two geographic levels: county and regions (group of counties) as defined by Florida highway safety plan. After mapping distribution of each transportation disadvantaged category at the county level and the geolocation of various transportation providers, the study develops a broad measure of transportation accessibility defined as number of transportation disadvantaged by service provider for counties and regions.

Preliminary Results:
The study finds that the greatest gaps in service availability are in the 26 small rural counties. For bigger urban counties such as Miami-Dade, the study finds lack of sufficient transportation availability especially for the disabled and people that don’t own a vehicle. The medium size counties tend to have a much greater number of population without a vehicle per service provider compared to other counties.

Conclusion/Contribution:
This study assesses transportation gaps for the needs of the growing elderly population as well as other transportation disadvantaged. The contributions of this study are: First, the findings from this research can be used to guide policy and plan to target improvement of transportation options for the disadvantaged. Second, the map-based visualized results are useful not only to stimulate related academic disciplines but also to provide valuable information to urban policy makers and transportation professionals on how to work together to address mutual challenges.

References
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Central theme and hypothesis
The rich literature on transportation and land use has found that a compact, new-urbanist neighborhood design can reduce driving and increase travel in alternative modes. In the near future, a large number of Millennials and long-settled immigrants will seek to own houses and a large number of baby-boomers will retire. Such demographic shifts posit an important question: will Millennials and immigrants travel in ways that change the land use – travel behavior relationships recently documented?

The hypothesis of this study is that different cohorts of the American population, defined by birth year for the native-born and by length stay in the US for foreign-born, respond differently to different land use patterns.

Approach and methodology
The study conducts a national-level inquiry using a repeated cross-sectional data set based on 2001 and 2009 National Household Travel Surveys (NHTS). Specifically, the study tests the elasticity of a variety of land use variables by interacting the land use variables with cohort membership dummy variables. The land use variables include population density and housing density at both the survey respondent’s residential and employment location. The travel behavior variables include: personal VMT, car passenger trips, car driver trips, transit trips and active travel trips. Cohort membership is defined as the decade of birth year for the native-born respondent and the years of staying in the US (less than 10, 10-20 and more than 20 years) for the foreign-born respondents.

Relevance to planning education, practice or scholarship
The study shows that the different birth and immigration cohorts do have statistically significant difference for land use – travel behavior elasticity values. Specifically, the Millennials and the new immigrants have higher elasticity of residential density than baby-boomers. For instance, the elasticity of residential density on personal VMT of the native-born respondents born in the 1950s is around 20% lower than those born in the 1980s and around 60% lower than the foreign born respondents staying in the US for less than 10 years.

The results indicate that the “policy significance” of land use changes, for Millennials and recent immigrants, is larger than for the older native-born or longer-settled population. This implies an opportunity to further transform our cities to become more sustainable, as demographic shifts may create opportunities for greater leverage for land use policy. This also implies that travel models that do not take account of shifting demographics may over-predict personal vehicle use. In addition, examining such different “policy sensitivity” levels among different demographic groups provides evidences on land use and transport policies targeting on special neighborhoods such as senior home communities or immigrant enclaves.

References
ON AGING AMERICANS' TRAVEL PREFERENCES

Abstract Index #: 700
Abstract System ID#: 154
Individual Paper

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Population aging creates various challenges to transportation planning and operating agencies, as well as to private sectors of transportation services. By 2030, 20 percent of the U.S. population will be over age 65 (Census, 2012). These elderly people demand dependable transportation access so they can remain independent and age in place (Farber and Shinkle, 2011; Nelson, 2013). To improve seniors’ transportation access, understanding their travel preferences is crucial. However, the aging baby boomer generation differs from their prior generations in many ways. They are better educated, wealthier, healthier, and more racially and ethnically diverse. They are likely to stay in the labor force longer and to be more active beyond traditional retirement (WHCOA, 2005). As a result, aging boomers are likely to have different travel behavior and transportation needs from what we planned or have been planning for their prior generations and other age groups. In this research, I examine whether seniors’ travel behavior change as they age and what factors might affect baby boomers’ travel preferences.

This paper conducts a cross-sectional survey analysis on the 2009 National Household Travel Survey to investigate whether the predominant travel preference—favoring automobile travel—hold for different senior age groups, while controlling for different socio-demographic, built environment, and transportation attributes. This analysis finds no evidence that Americans are giving up driving as they age. Thus I argue that planning as though seniors want to drive less is not likely to be successful; specifically, traditional public transportation options might not suit for aging boomers, and more diversified auto-alike transportation options are necessary. In addition, I consider behavioral aspects (such as attitudes towards safety, congestion, and public transit) in the analysis. I hypothesize that these behavioral aspects affect seniors’ travel preferences, and that their effects are stronger on seniors than younger generations. This hypothesis, if true, implies that promoting positive attitudes on certain travel options that were otherwise not preferred by seniors (e.g., public transit) could be a way to encourage seniors to change their travel choices. In summary, by studying senior’s travel preferences, this research generates useful information for practices to modify existing services, adopt best-practice solutions, as well as develop innovative options to improve senior’s transportation access.

References

EXPLORING THE CARGO BIKE AS A TOOL FOR MODE SUBSTITUTION BEHAVIOR

Abstract System ID#: 168
Pre-organized Session: Making Cycling Mainstream

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Cargo bikes are increasing in availability in the United States. While a large body of research has continued to investigate traditional bike transportation, cargo bikes offer the potential to capture trips that might otherwise be made by car. To investigate this, data from a survey of cargo bike users were evaluated using descriptive and inferential statistics, with the hypothesis that cargo bikes have the potential to contribute to mode substitution behavior. From a descriptive standpoint, 68.9% of respondents indicated a change in their travel behavior after purchasing a cargo bike and the number of auto trips appeared to decline by 1-2 trips per day. Two key reasons cited for this change include the ability to get around with children and the ability to carry more gear. This was confirmed by regression models which underscore this trend. Based on these results, further research could include focus on overcoming weather-related / elemental barriers, which continue to be an obstacle to everyday cycling, and also could further investigation how families with children that use cargo bikes relate to active transportation behavior in later life.

References


FORECASTING TRAFFIC ACCIDENTS FOR THE REGIONAL PLANNING IN SOUTHERN CALIFORNIA REGION

Abstract System ID#: 186
Poster

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Traffic accidents have become one of the most discussed topics in the transportation professional field, specifically in planning. There are workshops and tools to encourage the participation of transportation planners on road safety. However, applications to predict traffic accident remain scarce at the regional planning level such as the metropolitan planning organizations. The purpose of this research is to introduce traffic accident forecasting to the transportation planning field and that crash prediction can be consistently predicted at the regional planning level using transportation analysis zones as unit of analysis in the Southern California region. Modeling and forecasting traffic accidents at the regional planning level may potentially help identifying hot spots of accident locations, which is associated with the built environment; it may also be potential and beneficial
on allocating grants, understanding the impacts of safety countermeasures and initiating other useful planning researches including, but not limit to, environmental justice analysis.

This research’s framework and approach have taken under a consideration of several pioneer traffic safety planning literatures that have considered important findings and variables, which are related to the built environment. Ewing et al (2003, 2009) have stated that the urban sprawl in relation with the built environment has been an important factor in causing traffic accidents due to the density varied from urban to suburban. Additionally, Washington et al (2006) has also developed a planning level forecasting model called PLANSAFE that included built environment, demographic, socioeconomic, and weather variables. These researches have given a strong framework for modeling and forecasting traffic accidents in the Southern California region.

Descriptive statistics, multivariate regression, negative binomial, and simultaneous negative binomial regression are utilized to model and forecast the traffic accident locations. Negative binomial and simultaneous negative binomial are being incorporated into the research due to their capabilities of handling over-dispersed data and simultaneity of traffic accident outputs (Guevara et al, 2004). The data in this research paper will be obtained from several recognized sources such as the Southern California Association of Governments California Statewide Integrated Traffic Records System, Transportation Injury Mapping System and Census Bureau. Crash data is separated into injury and fatal traffic accidents. The explanatory variables are categorized into exposure, socioeconomic, demographic, built environment, and transportation networks. Geographic Information System is utilized for data collection, preparation, and management to perform spatial analysis. The Statistical Package for the Social Sciences Statistics is used to perform various statistical analysis and model building. The ability of forecasting traffic accidents is crucial for long-range planning in relation to transportation and land use planning scenarios.

References

Abstract Index #: 703
BARRIERS TO BICYCLING FOR TRANSPORTATION AMONG POTENTIAL AND OCCASIONAL CYCLISTS
Abstract System ID#: 193
Pre-organized Session: Making Cycling Mainstream

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Though the percentage of people bicycling for transportation rose during the last decade, with an average increase in bicycle commuting of 47% (League of American Bicyclists, 2013), still only 1% of all U.S. trips are made by bike (Flusche 2010). Studies have documented multiple reasons for the small numbers, including physical and psychological barriers to bicycling such as topography, trip distance, and perceived traffic risk (Cervero and Duncan 2003; Dill and Voros 2007; Sener, Eluru et al. 2009; Winters, Davidson et al. 2010; Xing, Handy et al., 2008). Yet researchers still lack a thorough understanding of how psychological barriers such as enjoyment or perceived risk compare to physical barriers such as topography or weather. This lack of a holistic understanding may explain why studies have only been able to attribute a portion of the variation in bicycling rates across cities (Cervero and Duncan 2003; Dill and Carr 2003). Furthermore, there is little understanding about perceived traffic risk beyond the general finding that many people fear bicycling next to motorized traffic (Dill and Voros 2007;
Sener, Eluru et al. 2009; Winters, Davidson et al. 2010). For example, researchers and practitioners have little empirical knowledge about how certain aspects of traffic risk compare to others in terms of their influence on a person’s decision to bicycle for transportation—important information for determining strategies to address such risk.

This paper presents evidence to help clarify how multiple barriers to cycling for transport—including potentially risky aspects of cycling—compare to one another for various types of cyclists. The paper elaborates on results from an internet survey examining these barriers for 307 potential and occasional bicyclists in the San Francisco Bay Area, and categorizes the barriers according to their strength of influence for cyclists of various experience levels. As expected, practical barriers such as trip distance and the need to carry belongings or passengers heavily influence the decision to bicycle for transportation. However, perceived traffic risk also plays a strong role, such that some cyclists who might bicycle for transportation—including current recreational cyclists—are dissuaded from doing so even for trips that might otherwise be considered bikeable. Additionally, the findings indicate that certain types of traffic risk are much more influential than others, suggesting that targeted strategies for addressing traffic risk may be beneficial.

The findings indicate that a multi-pronged strategy is needed to facilitate cycling in U.S. cities, including both short- and long-term efforts to make cycling more convenient. Efforts to improve perceived and actual traffic safety for cyclists are also critical, and, for many cyclists, inextricably connected to the provision of bicycle-specific infrastructure—particularly infrastructure that is physically-separated from cars. Ultimately, this study contributes to a greater epistemological understanding of barriers to bicycling—specifically the barrier of perceived traffic risk—so that these impediments can be more thoroughly understood and addressed in practice.

References


Abstract Index #: 704

NEIGHBORHOOD RESTRICTIONS AND DISPLACED CONSEQUENCES: THE LOCATION OF ALCOHOL-SERVING ESTABLISHMENTS AND DWI CRASHES IN HOUSTON

Abstract System ID#: 202
Pre-organized Session: Traffic Safety Planning

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A study in the City of Houston was conducted that related the location of Alcohol Beverage Outlets (ABO) that served alcohol after Midnight to late night driving-while-intoxicated (DWI) crashes. There is a very large literature showing the negative social effects of excessive alcohol use on drunk driving, crime, spousal and child abuse, suicide, and health problems. There is also a growing literature showing that higher concentrations of ABOs in small areas (outlet density) are associated with excessive drinking and subsequent harmful behavior.

What is not clear is how a city’s policy on the locating of ABOs affects this behavior. In the City of Houston, the City has deferred to local neighborhoods, most of which are governed by private deed restrictions. The result is that ABOs have been pushed into areas where there are no such restrictions, typically in downtown, selected
commercial areas, and transitional areas. The purpose of the study is to show how the concentration of ABOs has led to long DWI trips in the city.

Data sources and method: There were four data sets. First, there was a database of 777 ABOs that were open after Midnight on most days. This was compiled by the Houston Police Department. Second, there was a database of 1,660 DWI crashes within the City of Houston, compiled by the Texas Department of Transportation and verified by the Houston-Galveston Area Council. These crashes involved 170 fatalities, 91 incapacitating injuries, 306 non-incapacitating injuries, 657 possible injuries as well as extensive property damage to the vehicles. Third, there was a database of 6,856 DWI arrests occurring between Midnight and 6 am that was collected by the Houston Police Department. Fourth, to relate late night ABOs to late night DWI crashes, both data sets were assigned to 4,689 road segments from a modeling network. These road segments included all major and minor roads but not neighborhood streets.

Results: The ABOs were highly concentrated. Outlet density was high compared to other places where it has been documented, particularly in 16 small hot spots where the density was 238 ABOs per square mile. More than one-third of the crashes were within a quarter mile of an ABO. Based on an analysis of late night DWI arrests, the majority of DWI trips were long; the average was 6.4 miles, the median was 4.5 miles, and 90% were longer than 0.5 miles (‘walking distance’).

Using the modeling network, a Poisson-Lognormal-CAR spatial regression model was set up that related the number of late night DWI crashes per road segment to the number of late nights ABOs controlling for the size of the segment (lane miles) and for the distance of the segment from downtown Houston. It was found that the likelihood of a DWI crash substantially increased with each ABO located on the segment. Further, segments without ABOs had a higher likelihood of a DWI crash the closer they were located to a late night ABO on another segment.

Conclusion and Implications: The results are seen in a planning context of neighborhood deed restrictions in Houston limiting the siting of late night ABOs and pushing them into areas that are not restricted. The result is that the ABOs are in high concentrations and far from where most of their patrons live. A preliminary working hypothesis is that an implicit policy of deferring to neighborhood deed restrictions, while minimizing the effects of alcohol-related crime and misdemeanors on local neighborhoods, may be at the cost of putting a sizable number of drunk drivers on the road. It is argued that more research is necessary to determine whether there are better ABO allocation schemes that would reduce overall costs to the city and to its residents.

References
Existing research into the traffic safety of bicycling has focused on instrumental factors (e.g., intersection type, motor vehicle speed) but few studies have probed the role of attitudes in interactions between drivers and bicyclists. While attitudes feature prominently in current travel behavior research, the focus is primarily on their effect on reasoned behaviors like mode choice, not on perceptions of fellow roadway users. Research has shown that perceptions may be a function of mode, and people’s evaluations of the intentions and behavior of others were the most negative when viewed from inside a car versus seen from a bus or walking. Other research has indicated that drivers do not treat all bicyclists equally. Several studies have demonstrated differences in drivers’ overtaking distance of bicyclists depending on the gender, helmet use, or clothing of a bicyclist, but did not examine drivers’ attitudes or perceptions directly. Most existing research on attitudes between drivers and bicyclists relies on surveys of bicyclists; few data exist on driver attitudes.

The data presented in this paper are from a comprehensive evaluation of protected bike lanes in five large U.S. cities (Austin, TX, Chicago, IL, Portland, OR, San Francisco, CA, and Washington, DC) that included survey responses of 2,283 residents. Respondents answered questions about their travel behavior by each mode (car, transit, bicycle, walking), their perception of the design of both hypothetical and existing street designs, and demographics. Respondents were asked about the rule-following behavior and predictability of “people they encounter in the street,” namely drivers, bicyclists, and pedestrians. These are the constructs of interest in the present study.

Results showed that people who primarily commute by car are significantly more negative toward bicyclists than toward other drivers. The majority of these respondents agree that drivers follow the rules of the road and are predictable (67.6% and 69.7%, respectively), while only one-third agree that bicyclists follow the rules of the road and are predictable (32.9% and 35.2%, respectively). People who make most of their non-commute trips by car were even more positive toward their fellow drivers and negative toward bicyclists. Interestingly, while people who commute primarily by bicycle were more balanced in their evaluations than car commuters, they were still more likely to rate drivers as rule-following and predictable than bicyclists. There was a gender divergence on the predictability construct: women were significantly more likely to disagree that bicyclists are predictable. For both male and female car commuters, using a bicycle for some or all non-commute trips was associated with more positive attitudes toward bicyclists, but the effect was significantly stronger for women. This suggested that women’s attitudes toward bicyclists may be particularly affected by personal experience with bicycling. Overall, the analysis revealed that respondents’ attitudes vary by mode, and even people who make some or most of their trips by bicycle hold negative attitudes about bicyclists’ rule-following and predictability.

References

Recent research has increasing acknowledged that traditional variables such as travel time, cost, traveler socioeconomics, and the built environment cannot fully explain the complexities of observed travel behaviors, especially mode choices. At the same time, there is renewed interest in representing a wider range of behavioral influences on travel decision-making, including attitudes, perceptions, habits, and non-utility-maximizing choices, using advanced travel analysis methods (Cherchi, 2009). With these issues in mind, we have developed a conceptual framework of travel behavior (Singleton & Clifton, 2014) based on theoretical and empirical research in the transportation, economics, geography, and psychology fields. The framework attempts to explain many of the multiplex influences on individual, short-term travel behavior.

One of these behavioral complexities is the potential that travel is not solely a disutility to be minimized; there may be a positive utility to traveling for some people in some situations. Empirical evidence suggests that travel demand may not be completely derived from a demand for activities across space: some people like to travel (Ory & Mokhtarian, 2005). Theoretically, the positive utility of travel could result from the utility of destination activities, the utility of activities conducted during travel, and any intrinsic benefits of traveling (Mokhtarian & Salomon, 2001). Others suggest that findings of a positive utility (or a negative value of travel time savings) might be the result of unobserved travel experience factors, conjoint activities, non-linear responses to travel time, or modeling assumptions (Hess, Bierlaire, & Polak, 2005). Because the (monetized) value of travel time savings is crucial to cost-benefit analysis, failing to account for the positive utility of travel may result in overestimates of the benefits accruing or the mode shifts resulting from mobility- and accessibility-enhancing transportation projects. Planning for a future of autonomous vehicles and new information and communication technologies will require a greater attention to the issues surrounding the positive utility of travel.

In this study, we apply our conceptual framework of travel behavior towards a greater understanding of the causes and implications of the positive utility of travel. To this end, the most relevant sections of the framework include representing: a) activities during travel; b) experiential factors like safety/security, cost (time, unreliability), and especially pleasure (comfort, enjoyment); and c) preference variation across individuals. First, we create a synthetic mode choice demonstration dataset with alternative, environmental, and perceptual attributes. Synthetic data are based on separate attitudinal and household travel survey data sources, all collected in the Portland, Oregon, region. Next, we estimate discrete mode choice models on the synthetic data, testing a variety of specifications related to: 1) different explanations of the positive utility of travel (activities, experiences, taste heterogeneity, non-linearities); and 2) different levels/intensities of data collection (revealed preference travel surveys, augmented with attitudes, supplemented with stated preferences). Our first objective is to document the challenges related to data collection and modeling when attempting to understand complex relationships related to the positive utility of travel. Our second goal is to highlight the planning and forecasting opportunities available if we were able to collect sufficient data and adequately represent and model the factors that contribute to the positive utility of travel.

References

THE IMPACTS OF LRT AND NEIGHBORHOOD DESIGN ON AUTO OWNERSHIP AND USE: A QUASI-LONGITUDINAL ANALYSIS OF MOVERS IN THE TWIN CITIES

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Many regions in the U.S. have been promoting rapid transit programs and corresponding transit-oriented developments (TODs) to accommodate the increase in travel and slow the growth in congestion. Although previous studies have produced empirical evidence on transit ridership benefits of transitways, few have examined their impacts on auto ownership and auto use, which are directly related to congestion. This project fills the gap. Specifically, using the data collected from five corridors in the Twin Cities in May 2011, I will apply structural equations model to quantify the influences of the Hiawatha light rail transit (LRT) and neighborhood characteristics on auto ownership and auto use of station area residents through quasi-longitudinal analyses. The paper will answer the following questions: How do changes in neighborhood characteristics lead to the reductions in auto ownership and auto use? Does the Hiawatha LRT affect auto ownership and auto use after controlling neighborhood characteristics and confounding factors? How large are its impacts? This study will provide robust evidence on the relationships among transit and associated development, auto ownership, and auto use. The results are expected to offer critical knowledge in evaluating the role of rapid transit and TOD in addressing transportation challenges.

References

The objective of this study is to understand the relationship between built environment factors and bicycle-vehicle crashes in Seattle employing the Poisson lognormal random effects model. The explanatory variables include the factors of land use, road environment and traffic controls. The research questions are threefold: How are the built environment factors associated with the risks and frequencies of bicycle-vehicle crashes? Are the risks and frequencies of collisions spatially correlated? Can the theory of "safety in numbers" be an appropriate reference in explaining the scale economy in cyclist volume in reducing cycling risks? The findings of this study are: (1) Regulating speed limit is an effective strategy to reduce the risks and numbers of bicycle-vehicle crashes. (2) "Safety in numbers" is evidenced by the negative relationship between cyclist volume and risks of bicycle-vehicle crashes; also supportive effects from built environment elements are convinced through encouraging dense urban development for a safer cycling environment. (3) Commercial, on-arterial bicycle routes and traffic signals are correlated with higher propensities of bicycle-vehicle collisions. (4) The frequencies of bicycle-vehicle collisions are spatially auto-correlated, while the crash risks are not. For policy indications, the results suggest that complementary efforts, such as regulating speed limit and encouraging dense urban development, can promote cycling environment safety.

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Abstract Index #: 709
CAPTURING LOYALTY: PERSONAL CHARACTERISTICS, SERVICE QUALITY, CUSTOMER SATISFACTION, AND BEHAVIORAL INTENTIONS IN PUBLIC TRANSIT
Abstract System ID#: 254
Individual Paper

Public transit is a service that many cities recognize as being an important aspect in the development of socially, environmentally, and economically sustainable communities. Many cities are developing policies that promote walking, cycling, and public transit as viable alternatives to private motorized vehicles. Improving public transit as a way to increase mode share has consequently become the focus of many transportation agencies and public policy makers as they aim to develop more sustainable cities. Nevertheless, current transit usage is still much lower than automobile usage, and thus, novel strategies need to be developed to promote the use this sustainable mode. One way to increase transit mode share and reduce reliance on the automobile is to attempt to better understand how to maintain and increase ridership among existing transit users. Therefore, the relationship between perceptions of transit service quality, customer satisfaction, and behavioral intentions has recently been receiving much attention as transit agencies aim to identify ways to increase ridership. Improvements in perceived service quality increase the attractiveness of the mode, and therefore lead to growing patronage. With this in mind, the present paper examines how transit users’ personal characteristics, perceptions of service quality, and overall user satisfaction influence loyalty. Using information from five years of
customer satisfaction questionnaires collected by two Canadian transit providers in Montreal, Quebec, and Vancouver, British Columbia, this study attempts to better understand the complexities of the factors influencing passenger satisfaction and behavioral intentions in these two cities. The paper assesses factors such as perceived comfort, safety, crowding, frequency, and cleanliness to understand overall perceived service quality. It explores the relationships between transit users’ personal perceptions, service quality, satisfaction, and behavioral intentions using a Structural Equation Model (SEM) approach. SEM is used to determine ways in which levels of satisfaction can be increased in an attempt to understand how to maintain and increase ridership among exiting transit users. This method uses latent variables to capture individuals’ underlying perceptions of service quality and provides information about the relationships within the model. In addition, it is commonly accepted that individuals’ perceptions of service quality and observed customer satisfaction affect passengers’ repeat consumption or use of a product or service. Therefore, it is important to use a technique that can isolate the different factors influencing satisfaction and thereby discover how and where transit agencies can make policy changes to maintain or increase ridership levels. A series of models is developed to reflect the different groups using transit in Montreal and Vancouver to better understand how personal characteristics influence passengers’ perceptions of service quality, and consequently how perceptions of service quality influence perceived overall passenger satisfaction and behavioral intentions related to loyalty. Models account for differences in mode use, vehicle ownership, and income. More specifically, in each city captive riders (users who are dependent on transit), choice riders (car owners who choose to take transit), and captive-by-choice riders (users who are dependent on transit but could own a car) are accounted for and modeled by mode use (bus, metro/Sky-train). The findings from this study provide awareness into which factors transit agencies can focus on when developing policies that aim to increase satisfaction and grow patronage among the different groups they are serving. Insight into the perceptions of passengers using data from two geographically distinct settings provides useful information that can help improve the understanding of perceptions of service quality in general and shows how this understanding can be used to shape policy with the goal of increasing the use of public transit in other urban regions.

References


Abstract Index #: 710
SLIMMING THE STREETS: AN ANALYSIS OF THE BEFORE-AND-AFTER EFFECTS OF A ROAD DIET
Abstract System ID#: 266
Individual Paper

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The conversion of a four-lane undivided roadway to three-lanes with two through-travel lanes and a two-way center left-turn lane has been recommended by the Federal Highway Administration as a low-cost means to address safety concerns and create a more “community-focused, ‘Complete Streets’ environment” (Knapp et al., 2014, 1). These so-called road diets have been shown to result in a number of benefits including:
• Improved safety, including a reduction in crashes and speed (Knapp & Giese, 2001);
• Reduced delay at intersections due to separate left turn lanes;
• More consistent traffic flow;
• Improved facilities for pedestrians and bicyclists, including easier roadway crossings (Zegeer et al., 2001), and, when installed, dedicated bike lanes;
• Improved quality of life (Rosales, 2006).

Road diets are not without concerns, however. Depending on the specific design, parking could be reduced and/or access by delivery vehicles could lead to lane blockage. In addition, depending on the configuration of side streets, some traffic may switch to nearby side roads thus increasing traffic congestion on roads less suited to higher traffic volumes.

This research examines the before-and-after effects of the implementation of a road diet in San José, California. In Spring 2015, the City of San José, in collaboration with local neighborhood organizations and business groups, began a three-month road diet pilot program along an approximately 1-mile stretch of Lincoln Ave. in the Willow Glen neighborhood of central San José. Lincoln Ave. runs through a predominantly residential neighborhood with a small neighborhood business district. The street, a four-lane, undivided roadway, has become a popular route for commuters avoiding the more congested nearby freeways and expressways. Close to 20,000 vehicles per day travel along this route, often above posted speed limits, posing a risk to pedestrians and bicyclists. According to data compiled by the Santa Clara County Department of Public Health (2014), vehicle-pedestrian injury collisions are 63% higher in Willow Glen compared to the weighted average for other neighborhoods in the county, vehicle-bicycle injury collisions are 53% higher, and motor vehicle collisions are 69% higher.

Data on traffic counts, speeds, and turn movements was collected at 45 different locations several weeks prior to the beginning of the road diet pilot to determine baseline traffic data. Next month, data will be collected at these same locations in order to assess the effect of the pilot. According to John Brazil, manager of the Active Transportation Program for the City of San José, this data collection effort is the most extensive undertaken by the City for a roadway improvement of this type.

Despite the growing interest among transportation planners for the implementation of road diets, there is limited empirical evidence that examines the effects of these roadway conversions. This research contributes to that small, but growing body of literature by focusing on the effects of the road diet program with an emphasis on the change in traffic counts and speed along the main arterial, Lincoln Ave., as well as the numerous side streets running parallel and perpendicular to Lincoln. Due to the short-term nature of the pilot, it is unlikely that sufficient crash data will be available for analysis.

References

The goal of transportation is to provide people with access to a greater number of opportunities and interactions with other people, services, jobs, and places. With that goal in mind, transportation planning is about more than just mobility, or increasing the possible distance individuals can travel. It includes a focus on access, on increasing the set of easily available opportunities a person has (UN Habitat, 2014). In developing regions where data are limited or unavailable, there are very few empirical studies looking at access and even fewer that incorporate paratransit (or informal) bus systems. Without this data, it is hard to know how to suggest investments that would improve accessibility. This study is the first to use detailed paratransit data to explore access in developing countries, using a new dataset on Nairobi’s bus and matatu systems (see note below).

We have three objectives for this research. First, we use multiple measures of access to understand how access is spatially distributed across the highly unequal and socially segregated city of Nairobi. Second, we analyze how results differ based on the measure chosen. Third, we compare these results to actual travel behavior to identify potential limitations of using these measures.

A perfect measure of access would take into account land-use systems, changes in the transportation service, temporal constraints, and individual preferences (Fol & Gallez, 2014; Geurs & van Wee, 2004; Macário, 2014). Because of the multi-faceted nature of access, there is no one metric that captures the full extent of accessibility, and measures should be chosen based on the specific situation or question being asked. To determine where and who has access we evaluate three different accessibility measures: contour measures, gravity measures, and utility-based measures. These were chosen because they strike a balance between being simple enough to interpret and use in practice while incorporating components of an ideal accessibility measure. For each of these measures we create a heat map, a spatially explicit visual representation of the level of access that a person has at any given location in Nairobi. Each map displays one of the three different accessibility measures. Taking subsets of these maps, we highlight how accessibility varies by neighborhood and how it varies based on different assumptions about the traveler’s age, ability to pay for transit, and car ownership. We also compare the maps to each other to understand how access varies based on the specific metric used. Finally, we compare the results to actual behavior from travel survey data. The discrepancy between the actual travel behavior and the level of access that we measure allows us to identify potential barriers to access that are not being captured in the metrics.

This project is the first empirical analysis of accessibility in Nairobi, and the first accessibility study to use detailed data on paratransit. The project also focuses on finding helpful visual tools for a broader public to understand the issue of access. Overall our findings contribute to the literature on how to measure and draw attention to accessibility in a highly socially segregated city in the developing world where inequality has been embedded into the spatial organization of the city’s infrastructure (Klopp, 2012). Comparing and evaluating different ways of measuring accessibility is the first step in a larger research agenda meant to raise questions about how the spatial distribution of infrastructure contributes to aspects of social cohesion and inequality.

Notes
AIR QUALITY, ELECTRIC VEHICLES AND THE MOTORCYCLE CITY

A number of cities, particularly in Southeast Asia, have adopted the motorcycle as the primary means of urban transportation. Relatively high, but flat population and job densities, combined with a fairly uniformly distributed road network and often narrow streets, make the motorcycle a convenient choice for point-to-point travel in many cities. Low-cost Chinese motorcycles, credit, and often subsidized gasoline make it an affordable choice as well. Despite the perceptions of motorcycling as a high-risk activity in the US, low speeds and great numbers of motorcyclists and bicyclists in motorcycle cities combine to produce fairly low collision-related fatality rates, when compared to cities of similar size and wealth that rely more on private cars and informal transit. They are also extremely efficient from a system, as well as an individual user’s perspective because they consume far less roadway and can maneuver more flexibly than cars. Narrow arterial roads frequently carry as many people per lane in motorcycle cities as superhighways in American ones. Even in highly congested conditions, streets filled with motorcycle tend to maintain vehicle flow instead of coming to the bumper-to-bumper halt that is familiar to most car drivers and bus passengers.

Despite these advantages, a heavy reliance on motorcycles has a several disadvantages. Most notably, inexpensive motorcycles operating on often adulterated gasoline produce high levels of local pollution, which reduces life expectancy and cause harmful respiratory diseases particularly for the young and elderly. In many countries like Indonesia, reliance on gasoline for personal travel makes it difficult to reduce or remove expensive and economically distorting fuel subsidies.

This project proposes to evaluate the extent to which electric motorcycles or e-bikes are a potential replacement for gasoline-powered motorcycles and at what price points, consumers are willing to adopt them in Solo, Indonesia. Solo, Indonesia, is a Javanese city of 500,000 and is a quintessential motorcycle city. Between 2006 and 2011, the fleet of registered motorcycles grew 60% from 170,000 to 270,000. Two thirds of trips are by motorcycle and origins and destinations are dispersed throughout the city. Even during peak time periods on major corridors less than 10% of travelers use public transit, and 80% of these are on large regional buses, not local ones.

To evaluate the relative importance of the price, speed, range, and charging times of electric vehicles to consumers, I will develop a joint stated- and –revealed preference (RPSP) survey. Researchers commonly apply RPSP surveys to estimate the potential market-penetration of new products or the probability that households will use a new transportation investment (Train and Wilson 2008; Ben-Akiva et al. 1994). Brownstown, Bunch,
and Train (2000) used an RPSP survey to estimate the potential market for alternative fuel cars in California. The combination of revealed preference and stated preference data lets researchers benefit from introducing new alternative choices (such as electric motorcycles), but to temper some of the unreliability of stated preferences by scaling and correlating them with actual revealed preferences (such as existing motorcycles). By allowing for multiple responses to several alternative sets of choices, joint RPSP can also provide a panel with which to estimate and control for individual-specific tastes and preferences.

References


Abstract Index #: 713

STUDENT TRAVEL: ANALYSIS OF BUILT ENVIRONMENT AFFECTING MODE CHOICE IN 13 DIVERSE REGIONS OF THE UNITED STATES

Abstract System ID#: 291
Individual Paper

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According to the most recent 2009 National Household Travel Survey (NHTS), 9.6% of students between the ages of 5 and 15 walked to or from school, and 1.1% biked. In 1969, at the time of the first Nationwide Personal Transportation Survey (predecessor to NHTS), 48% of students walked or biked to school (Ewing et al. 2004). 90% of children living within one mile of school walked or biked there compared to about 31% today (Schlossberg et al. 2006). Why the decline in walking and biking to school? Environmental characteristics of the neighborhood, environmental and policy characteristics of the school, and characteristics of parents and children are reported related with walking and biking to school (Ahlport et al. 2008; CDC, 2002; Ewing et al. 2004).

In this study, we will examine the relationship between mode of travel to school and the full range of built environment and sociodemographic characteristics that might affect mode choice based on 13 diverse regions of the United States. The regions are diverse as Boston and Portland at one end of the urban form continuum and Houston and Kansas City at the other. To our knowledge, this is the largest sample of student travel records ever assembled for such a study outside the NHTS. And relative to NHTS, this database provides much larger samples for individual regions and permits the calculation of a wide array of built environmental variables based on the precise location of households and schools. NHTS provides geocodes (identifies households and schools) only at the census tract level. For built environment, all D variables of built environment from Ewing and Cervero (2010) – density, diversity, design, distance to transit, destination accessibility, and demographics – are consistently defined and measured across regions. With more than 40,000 school trips in the 13 regions, a multinomial logit model will be estimated to explain school mode choice for a sample of K–12 students.

The results of this study will provide knowledge of student travel behavior for policy makers and planning practitioners to promote more students walking and biking to school, which could benefit both students’ health and regional air quality.
References


Abstract Index #: 714

URBAN INEQUALITY IN ACCESSIBILITY TO AMENITIES AND EXPOSURE TO HAZARDS: THE LOCATION, ACTIVITY, AND ENVIRONMENTAL EXPOSURE (LAEX) FRAMEWORK

Abstract System ID#: 302
Individual Paper

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This study examines how time-location activity patterns influence exposure to health-related built environment and its implications to land use planning, urban form, and public-transit and non-motorized transportation planning. It examines individual people’s geographic patterns and explores how this influences the utilization of urban spaces, especially their activity patterns, travel behaviors, and exposure to amenities and hazards. This essay aims at providing a heuristic theoretical framework on environment health. The framework consists of the four main factors, including 1) external factors, 2) behavioral level, 3) environmental factors, and 4) health outcomes. In addition to the theoretical framework, another purpose of the essay is to test the framework in more advanced methodology in estimating individual activity spaces using individualized geographic data rather than using aggregated geographic residential areas, such as Census tracts, Census blocks, and so on.

This study uses two different methods to estimate location activity spaces, such as 1-standard deviation ellipse (SDE1) and activity space path (ASP), and finds that accessibility and exposure levels are generally similar except for some measurements. It uses Global Positioning System (GPS) driven travel behavior data obtained from residents living around the EXPO light rail line in Los Angeles. For built environmental qualities, the study measures non-residential land use, employment density, street connectivity, block size, public transit density, air pollution concentration, and polluting company density within individual residents' time-activity spaces. For the percent of non-residential land use, public transit group shows higher percent of non-residential land use within activity space, whereas non-public transit group shows higher percent within ASP. In terms of grocery density, car owner group shows a higher density within SDE1 activity space, whereas non-car owner group has higher density within their ASPs. The same pattern can be shown in polluting industry density. The density of polluting companies within SDE1 was higher in car owner group than non-car owner group. However, the polluting industry density within ASPs was higher in non-car owner group than car owner group.

From the empirical evidence supporting that an individual’s lower socioeconomic status is linked to lower environmental quality in which the person spends most time, this study suggests that institutional factors can contribute to alleviating or exacerbating the inequality. Mixed-income and transit-oriented development would help people to increase accessibility to amenities and reduce time to travel which can increase possibility to exposure to air pollution generated from automobiles. However, the smart growth strategies need to be implemented with more considerations on how to achieve some policy goals without conflicting in practical ways. Most mixed-use developments provide limited number of residential options to lower SES group, and some...
transit-oriented developments are adjacent to major traffic corridors. Since this research doesn't examine the actual effect of institutional factors on location activity spaces and health-related behaviors, the institutional factors and activity space and environmental health will be tested for the future research.

References


Abstract Index #: 715
CRASH SEVERITY AS FUNCTION OF DRIVER DEMOGRAPHICS, BUILT ENVIRONMENT, AND ROAD CONDITIONS: A LOGIT MODELING APPROACH
Abstract System ID#: 298
Individual Paper
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This study uses a logit model to explain crash severity based on (1) the gender and age of at-fault drivers, (2) the surrounding built environment, and (3) road conditions. The model is estimated for the Central Ohio Region using multiple files of the Ohio Department of Public Safety data base for the years 2006-2011 together with TAZ (Traffic Analysis Zone) data on the built environment and socio-economic characteristics of the surrounding population. The unit of analysis is the individual crash. This approach adds much detail to the factors that influence crash severity, which cannot be captured in more aggregated approaches such as attributes of the accidents location, vehicle and road features, weather conditions, and time of day. The logit model is used to explain the probability of a bodily-injury (BI) crash, including fatality, with the alternative being a property-damage crash. Because the age of the at-fault driver is a continuous independent variable, it is possible to precisely assess the impact of age, for both male and female drivers. The results show that there is a significant relationship between the probability of a BI crash and drivers’ behavior, built environment, driving conditions, and driving situation. The policy implications of the results are discussed.

References

The Greater Houston area, with an estimated population of 6.2 million people, is wrestling with a traffic safety epidemic. In 2014, the area experienced over 129,000 serious motor vehicle crashes, resulting in 603 fatalities and nearly 18,000 serious injuries. This represents a 9.4 percent increase in deaths and a 20.9 percent increase in serious injuries from 2011. With an additional 3 million residents expected over the next 25 years, the potential for fatality and serious-injury growth increases.

With the adoption of The Moving Ahead for Progress in the 21st Century Act (MAP-21), metropolitan planning organizations (MPOs) will be required, in coordination with their State DOT, to establish a set of safety performance targets either supporting the State DOT’s targets or a target unique to the metropolitan area in question. State DOTs have been addressing traffic safety for years. However, very few MPOs have established safety programs nor the resources to run such programs.

The Houston-Galveston Area Council (H-GAC), the MPO for the greater Houston area, has been conducting regional traffic safety planning for nearly 15 years. Beginning as a GIS-based crash-mapping exercise, H-GAC’s program has worked to engage representatives from various disciplines, including engineering, law enforcement, health care, advocacy, research, and policy, to develop solutions for addressing the traffic safety problem in the region. Working under the guidance of a Regional Safety Council, H-GAC’s program has conducted a variety of activities:

- Staff provides assistance to regional communities and interested entities in conducting crash analyses ranging from focus-area assessments (such as drunk driving and young drivers) to location assessments.
- In conjunction with the Houston Police Department and Texas Pictures, H-GAC commissioned the development of a Telly-winning DWI documentary, Chronicles of a Teen Killer, which was geared towards high school students to show the dangers and ramifications of drunk driving.
- Staff, in partnership with Texas Children’s Hospital, conducted a large-scale outreach campaign on child booster seat safety to over 300,000 area families.
- H-GAC, with permission from the Federal Motor Carriers Safety Administration (FMCSA), implemented the FMCSA’s NO ZONE Campaign in the region, which involved a enhancement to the NO ZONE warning graphic to allow for viewing at a greater distance of unsafe areas around a truck, along with the installation of 1,000 2’x4’ warning decals on trucks throughout the region.
- H-GAC, through a grant with the Texas Department of Transportation, has been operating a multi-agency Regional DWI Task Force consisting of 17 law enforcement agencies, the only formal multi-agency approach in the State.

Through partnerships, innovation, and creativity, H-GAC has helped to maintain the traffic safety conversation as a priority issue in the region.

This presentation will provide an overview of how H-GAC and the greater Houston region have worked to address its traffic safety problems. It will provide a brief history of the Program, examples of engagement with stakeholders, an overview of approaches H-GAC has taken to address traffic safety.

References
WHAT DETERMINES TRAVEL DEMAND BY BUS IN THE UNITED STATES? A NATIONAL STUDY AT MSA LEVEL

Abstract System ID#: 324
Individual Paper

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Although the demand for travel by transit in the United States has historically been low, it is generally believed that factors such as increasing gas price over the last decade compelled many auto drivers to switch to transit. It is important for transit policy makers, planners, managers, and operators to understand the nature of determining factors for transit demand so they can make informed policies and take necessary actions to provide efficient transit systems. Hence, there is a need for a study that analyzes transit travel demand in recent time. This study attempts to do so by investigating the factors determining transit travel demand by bus within US Metropolitan Statistical Areas (MSA) in 2010. It examines the impacts of both internal and external factors on transit travel demand. Broadly, it analyzes the relationships among physical environment, socioeconomic environment, transit systems characteristics, and transit travel demand. External factors are those that transit managers and operators cannot exercise their control over such as population density. Unlike external factors, internal factors are system-specific that transit managers and operators can adjust and control such as fare, operating hours, headways, etc.

The authors collected data on all 358 MSAs nationwide. The data mostly come from two sources: the U.S. Census Bureau and Integrated National Transit Database Analysis System. Using data from these two sources, the authors constructed several additional variables as well. For instance, transit coverage is measured as the ratio of MSA population to route miles, while transit fare is measured as the ratio of fare revenue to passenger trips. While gas price data was drawn from a public website (GasBuddy.com), MSI was calculated based on the procedures shown by Ewing et al. (2003). Transit orientation patterns of the MSAs were estimated by both telephone interviews of the transit managers and visual inspection of the transit network of each individual system.

Initial data analysis indicated presence of non-normality, non-linearity and heteroscedasticity among the variables. To address these issues, the authors transformed all continuous variables to natural logarithm, while keeping three dummy variables untransformed. Tolerance and Variance Inflation Factor values indicate presence of no collinearity among the predictors. Results indicate that while seven out of eight internal variables were found to cause significant impacts on transit travel demand by bus, only five out of ten external variables were significant predictors. The significant internal predictors are availability of rail transit, transit supply, transit fare, revenue hours, average headway, transit safety, and transit coverage. Among the external factors, percentage of African American population, percentage of carless households, vehicles per household, percentage of college
population, and percentage of immigrant population proved to be significant predictors. Unlike popular belief, gas price did not come out as a significant explanatory variable of travel demand by bus.

Because this is a comprehensive study that includes all MSAs in the country, the significance of its findings is worth mentioning. Since the internal factors are predominantly the significant predictors of transit travel demand by bus mode, it is probably safe to argue that the managers and operators can decide on the quantity and quality of transit services they will be able and willing to supply to the taxpayers without depending on outside factors. In other words, they can increase transit ridership by adjusting few significant factors that are specific to their transit systems for which they do not need to depend on the outside world. Keeping this in mind, the transit policy makers and planners may make appropriate plans and policies that will help transit authorities provide efficient transit systems to its users.

References


Abstract Index #: 718

SHARED AUTOMATED VEHICLES AND TRANSIT: AN AGENT BASED COMPARISON OF SCENARIOS

Purpose and Need

Shared automated vehicles, sometimes referred to as “automated taxis”, have been hypothesized as the transport mode of the future. Such automated taxis would enable travelers to have point to point travel on demand without requiring users to own their own vehicle. As such, shared automated vehicles could offer a new form of transit with a unique set of benefits and challenges.

In particular, it has been shown that approximately 1 shared automated vehicle could replace about 10 owned vehicles currently on the roadways (Fagnant & Kockelman, 2014). Other research has shown that shared automated vehicles could potentially save significant time and money when deployed within denser urbanized areas (Ballantyne et al., 2014; Burns, Jordan, & Scarborough, 2013).

This proposed new mode has been viewed by some as a potential replacement for transit. However, the replacement of transit with shared automated vehicles could result in increased congestion, particularly during peak periods, and also possibly higher transportation energy use. Analysis has also shown that shared automated vehicles could not readily duplicate the high capacity of current transit systems (i.e. buses and trains).
Alternatively, shared automated vehicles could serve as feeders for transit, extending the geographic scope of transit systems and boosting transit ridership. These two divergent perspectives demonstrate the uncertainty which surrounds how the introduction of automated vehicles might affect future transit operations.

Research Question
How can automated vehicles be integrated with existing transit services to improve their level of service as well as their sustainability performance? Current transit systems operate on fixed schedules and cannot readily adapt to variation in demand over time and space. On the other hand, current transit systems are likely better able to deal with concentrated peak hour flows than a system of shared automated vehicles alone. Ideally, the best features of existing transit and shared automated vehicles could be intelligently integrated into a new system which takes advantage of the strongest features of each.

This project will build a series of agent-based simulations of travel behavior in Ann Arbor and its surroundings. Such agent-based simulations will track the travel behavior of individual agents from point to point with a high level of dynamic detail (i.e. in minutes). Three scenarios will be compared, one with current transit patterns, one with transit travel replaced by shared automated vehicles, and one with a hybrid of transit and shared automated vehicles. For each of these scenarios, the mobility performance and the sustainability performance will be analyzed with data created from the simulations.

Mobility performance will be evaluated based on average and worst case (95%) wait and travel times for passengers. The sustainability performance of each system will be measured by energy use, vehicle miles traveled, and levels of traffic congestion.

Expected Findings
- Shared automated vehicles without transit would result in unacceptable levels of congestion during peak periods.
- Transit without shared automated vehicles would result in unnecessary energy use during off-peak periods and poor level of service for trips to some parts of the service area.
- Shared automated vehicles in conjunction with transit would result in reduced wait times, reduced travel times, and lower energy use, without worsening congestion.

Implications
The results of this research may be used by future transit agencies and car share companies to identify ways to adapt their operations as automated vehicles become available. Additionally, by highlighting the potential benefits of shared automated vehicles, this research should add to the evidence that a future transportation system based on vehicle sharing has significant sustainability benefits over a system centered on vehicle ownership alone. It is hoped that this research lends support to policies and institutions which are working on promoting shared mobility services.

References
This paper examines warehousing and distribution center (W/DC) decentralization. W/DC decentralization is an important planning issue. It is argued that in seeking more efficient and larger-scale operation, W/DCs are moving to the urban periphery, trading off transport costs and access to market and labor for lower land costs. While decentralization may lead to lower costs for freight distribution, greater distance from population centers may lead to increased freight vehicle miles traveled and their associated externalities.

Is there a consistent trend of W/DC decentralization? Only a few researchers have investigated this issue, and results vary depending on the study area or methodology. Existing literature is either geographically limited or uses rudimentary indicators of decentralization. An expansion of warehousing activities and associated W/DC decentralization have been documented in major metropolitan areas – Los Angeles, Atlanta, and Paris (Dablanc and Ross, 2012; Dablanc, et al., 2014). These studies used centrography point pattern analysis and documented W/DC decentralization and polarization in Atlanta 1998-2008 and in Los Angeles 1998-2009. Cidell (2010) used Gini coefficients and observed not only decentralization in US metropolitan areas, but also rather complex processes of freight land use adjustments in 1986-2005. In Seattle, W/DC concentration has been documented, attributed to growth management policy (Dablanc, et al., 2014). The authors surmise that W/DC decentralization may occur only in very large metropolitan areas, in which functions of major trade nodes and major consumer markets coexist.

I document recent trends in W/DC location and decentralization in US metropolitan areas 2003-2012 and test multiple measures of spatial change. Even if W/DCs are decentralizing, the question is whether they are decentralizing more than the population and employment distributions they serve. Thus simple measures of spatial shifts with respect to the city center may be inadequate. Moreover, it is not clear that even if W/DCs are decentralizing more than population and employment, truck VMT must increase. Documenting whether there is a consistent trend of W/DC decentralization is a first step in determining the extent to which decentralization may be a problem worthy of policy intervention.

I define and test spatial structure indicators of W/DC distribution using zip-code level employment data. The complication is that W/DCs are not standalone facilities, but strategically located along freight corridors in consideration of land and transport costs, access to market, labor, and freight nodes. No single measure can fully describe W/DC distribution. Rather, a measure which considers distribution of market proxies – population and employment – is necessary. I present three measures of spatial structure to quantify W/DC distribution: centrality, concentration, and relative distribution. The two former measures quantify W/DC distribution itself (Anas, et al., 1998). Centrality measures the degree to which an urban activity is concentrated with respect to the CBD: W/DCs can be either centralized or decentralized. Concentration measures the degree to which an urban activity is clustered in several locations: W/DCs can be strategically clustered around major freight nodes or dispersed throughout the metropolitan areas (Galster et al. 2001). In California, Los Angeles was the only place with substantial increase (13%) in one of the centrality measures – distance to CBD, whereas San Francisco (–2%), Sacramento (3%) and San Diego (0%) showed decrease or trivial increases. The latter – relative distribution – considers decentralization of market proxies and quantifies relative distances to them. The use of multi-faceted measures is well-suited to the analysis of W/DC decentralization in that it consistently quantifies the spatial structures of W/DC in response to distribution of relevant activities in a simple manner. The result varies depending on the role and extent to which each metropolitan area is involved in global goods trade networks. Possible explanations for differentiated estimates are discussed.

References


Abstract Index #: 720
USING FACILITY DEMAND MODELS TO ASSESS EXPOSURE TO HAZARDS: NON-MOTORIZED TRAFFIC, ACCIDENTS, AND AIR POLLUTION
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Individual Paper
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Recent research has expanded our knowledge of how non-motorized traffic flows on transportation networks. As efforts to encourage bicycle and pedestrian traffic grows, planners are striving to address exposure to hazards (e.g., traffic accidents or air pollution) that may partially offset the public health benefits associated with non-motorized travel. One class of models that may help to assess patterns of exposure to hazards are facility demand models. A key advantage of facility demand models is their capability to make spatially-resolved (i.e., <100 meter) estimates of bicycle and pedestrian traffic (based on carefully selected non-motorized traffic count locations). In this paper, we build on previous facility demand models in Minneapolis, MN by using a modeling approach that employs network buffers to calculate predictor variables while also allowing for varying geographic scales for each predictor variable. Additionally, we include recently developed employment accessibility metrics in our models that were specifically designed for cyclists and pedestrians. We illustrate how facility demand models for bicycle and pedestrian traffic can be used as a critical input in the planning process. Specifically, we show how combining spatial data of (1) bicycle-vehicle crashes, (2) air pollution concentrations, and (3) facility demand model-based estimates of non-motorized traffic volumes can lead to better planning decisions. For example, we identify locations that have high crash counts (i.e., total crashes) as well as high crash rates (i.e., crash count / non-motorized traffic volume) to prioritize sites for design interventions. Similarly, locations that have high population-level exposure to air pollution (i.e., high non-motorized traffic volumes and high air pollution concentrations) may be “hot-spots” of exposure that can be addressed by planners. Our work illustrates how better information about where people cycle and walk can build an evidence-base for investment in facilities and design guidelines that prioritize safety for non-motorized travel. Our results may be of interest to planners who are interested in policy prescriptions related to cycling and walking (e.g., Complete Streets, Safe Routes to School) or non-motorized travel in general.

References


This research investigates social influence in transportation mode choice, in order to explore the potential for socially oriented programs to be used in transportation planning aimed at increasing the use of alternative travel modes. Social influence has been identified as a relevant factor in other behaviors and there is increasing evidence that social influences are a relevant factor in transportation decision making as well. There are examples of programs that use social processes in order to promote the use of alternative modes of transportation. The UC Davis goClub, in which members make a commitment to use alternatives to driving alone, regularly offers incentives to current participants for enlisting their friends or colleagues into the program. Another example is May is Bike Month; most participants are members of teams. Team membership likely encourages competition between teams to be the team with the most miles, and cooperation within teams to support the team by bicycling. Although most Bike Month participants joined the program after hearing about it from someone they know, the effects of the social processes within the program are not known. Incorporating elements of social processes in a thoughtful manner requires improved knowledge of the mechanisms through which and the extent that social influence occurs.

We find that that individuals tend to use the same mode of transportation as those to whom they are socially connected. Respondents with higher numbers of social contacts biking are more likely to bike themselves, however similarities in behavior within social networks may be attributed to several plausible explanations. Similar behaviors may be due to the effects of comparable or shared circumstances. Behaviors may also be similar because individuals self-select into social groups. Shared traits such as environmental attitudes could contribute to the formation of friendships or professional relationships, and these same attitudes may result in friends or colleagues making the same transportation choices. In addition, even when social influences are almost certainly present, it may be difficult to determine who is influencing whom when socially connected individuals have the same behavior. These sources of endogeneity are referred to as shared environment (similar circumstances), self-selection (into friendships and ego-networks), and reflection (uncertainty in the direction of influence). Accounting for these sources of endogeneity and identifying a remaining effect of social influences is evidence that social effects matter in transportation choices.

Using a sample of university students, with data on their social networks and network transportation mode use, we utilize an instrumental variables probit model to estimate the effect of social influence in transportation mode choice. By using the instrumental variables approach, we account for the endogeneity that may result when the ego and alter have similar choice environments. We also control for the ego’s neighborhood by including the ego’s commute distance to campus in the model. We find that even when accounting for the shared environment or circumstances for the ego and their social network, social influence is an important factor in transportation mode choice. Future work will aim to better disentangle the competing explanations noted here. Utilizing more structured research designs, such as experiments, these questions could be better addressed. Here we show that there is evidence for social effects in transportation mode choice.
Federal, state, and local governments in the USA have the goal to reduce petroleum use and associated Greenhouse Gas (GHG) emissions from ground passenger transport. The main approach to reducing energy consumption and (more recently) related CO2 emissions from daily travel has focused on vehicle and fuel technology. Policies and regulations include fuel efficiency and CO2 emission standards for new vehicles, tax incentives for the purchase of fuel efficient vehicles, lower vehicle registration fees and other incentives for fuel efficient cars, as well as support for and regulation of alternative fuels.

In spite of these efforts, in 2010 CO2 emissions per capita from ground passenger transport (walking, cycling, public transportation, and driving) in the U.S. were 3 to 4 times greater than in wealthy Western European countries like Austria, Denmark, Germany, the Netherlands, or Norway.

Different levels of energy consumption and CO2 emission are related to technological factors, such as fuel efficiency of vehicles or fuel type, as well as mode choice and intensity of mode use. This presentation analyzes differences in CO2 emissions from daily travel, vehicle fuel efficiency, travel behavior, and transport policy in the U.S. and Germany with the goal to provide insights for the U.S. on how to reduce CO2 emissions.

Germany was chosen for comparison, because it is Europe’s largest economy and most populous country. Additionally, Germany and the U.S. share similarities that help make policy lessons more meaningful. Both countries are wealthy western democracies with federal systems of government, have among the highest motorization rates in the world, boast large limited access highway networks, have a similar share of licensed drivers in the population (70%), and are home to significant automobile industries.

This presentation first compares trends of CO2 emissions from passenger transport in Germany and the USA since 1990. Germany reduced CO2 emissions from passenger transport at a faster rate than the USA—even controlling for population growth, economic activity, and travel demand. Moreover, for all indicators CO2 emissions from transport were much higher in the USA than in Germany: 11.7 times greater for total CO2 emissions, 3.1 times per capita, 2.1 times per passenger kilometer, and 2.4 times per unit of Gross Domestic Product (GDP).

Analysis of person level data from national household travel surveys for the year 2008/2009 (NHTS 2008/2009 for the USA and MiD 2008/2009 for Germany) indicates 2.3 greater travel related CO2 emissions per day per trip maker in the USA than in Germany. In both countries CO2 emissions from daily travel are greater for men than
for women, employed individuals than those unemployed or not in the workforce, and persons with easier car access.

Daily travel related CO2 emissions per person are lower in both countries for individuals living in larger metropolitan areas, in urban areas, and at higher population densities. Even controlling for dissimilarities in socio-economic factors and land-use, transport related CO2 emissions per capita are much higher in the USA than in Germany.

Next the presentation compares US and German transport policies that can help explain these remaining differences in CO2 emissions. Policies analyzed include fuel economy and CO2 tailpipe emission standards, vehicle registration fees and taxes, incentive programs for the purchase of fuel efficient cars, and biofuel standards. Moreover, the presentation highlights policies in Germany and the USA that shape the relative attractiveness of driving, public transport, walking, and cycling. The analysis concludes with policy lessons for both countries.

References


Abstract Index #: 723

SPATIAL STRUCTURE OF U.S. FREIGHT MOVEMENT: A NETWORK ANALYSIS APPROACH

Abstract System ID#: 365

Individual Paper

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Transportation vulnerability analysis is important subject matter and can be analysed by identifying important nodes, links, paths, and sub-networks (Berdica, 2002). If critical nodes or links are mal-functioned due to natural or man-made disastrous incidents, the entire network can be paralyzed.

This paper employs graph theory and complex network analysis to prioritize U.S. ports and identify critical nodes (ports) and critical links (corridors) and assess vulnerability (or robustness) of U.S. freight networks. It investigates freight flows through three modes (truck, rail, and air) in the freight network of the United States and examine the network structure and nodal centrality of individual freight zones using data from Freight Analysis Framework 3 (FAF3) (Southworth et al., 2011). Centrality measures for overall network structure include in-degree, out-degree (Freeman, 1977; 1979; Borgatti, 2005), closeness centrality (Sabidussi, 1966; Freeman, 1978; Freeman, 1979; Wasserman and Faust, 1994; Borgatti, 2005; Opsahl et al., 2010), betweenness centrality (Anthonisse, 1971; Freeman, 1977; Brandes, 2001; Borgatti, 2005), eigenvector centrality (Bonacich, 1972; 2007; Bonacich and Lloyd, 2001, 2004; Ruhnau, 2000), page rank (Langville A, 2006), clustering coefficient (Watts and Strogatz, 1998), reciprocated vertex pair ratio, and actual volumes and values.

Freight movements are also analysed by commodity categories based on Standard Classification of Transported Goods (SCTG) codes, in order to examine different spatial structures of supply chain of each commodity. Each commodity has its own supply chains which uniquely characterize its spatial distribution patterns. Nationally significant commodities were selected such as electronics (SCTG 35), crude petroleum (SCTG 16), machineries
(SCTG 34), and Cereal Grains (SCTG 02) and analysed for both inbound and outbound freight movements as well as critical nodes and corridors as examples.

Understanding spatial structures of different commodities can provide policy developers and decision makers to come up with better regional strategies to strengthen economic competitiveness and establish regional advantages through industry clustering and multi modal connection improvement. In regions where transportation connections are limited, regional political strategies can be modified to improve efficiency of demand and supply chains of commodities and strengthen regional economic sustainability.

This paper shows that utilizing social network analysis, which is an analytical tool used predominantly by social scientists to study structural characteristics of a social network, could be useful for network analysis in conjunction with graph theory (Scott, 2000; Wasserman & Faust, 1994; Chai et al., 2011) in order to understand characteristics of the given networks and improve sustainability of the system under any unexpected disastrous events.

References

Abstract Index #: 724
INTERSECTING NATIONAL CLIMATE CHANGE POLICY WITH LOCAL DEVELOPMENT TRENDS, TRAVEL PATTERNS, AND BUILDING FORMS
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Individual Paper
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President Obama’s June 2014 announcement of the EPA’s Clean Power initiative coupled with his earlier agreement with American auto manufacturers to double corporate average (vehicle) fuel economy (CAFÉ) standards to 55 mpg by 2025 have finally solidified the U.S. approach to reducing CO2 and mitigating climate change. These policy shifts will coincide with several other ongoing trends: (1) The increased availability and reduced cost of natural gas, particularly for electricity generation; (2) Increases in the number of U.S. households who are favoring urban locations over suburban ones; (3) The fact that many Americans are driving less and walking, bicycling, and taking transit more; and, (4) The fact that an increasing number of U.S. cities are considering imposing mandatory building energy performance standards. How will these various policy initiatives and spatial development trends combine to affect future energy use and U.S. greenhouse gas emissions?

To find out, we will construct two “back of the envelope” activity-emissions models and apply them to a representative set of ten U.S. metropolitan areas. This work builds on, and disaggregates prior national-scale work done by Ewing et.al. (2008a, 2008b), Ewing and Cervero (2010) and National Research Council (2010)

The first model will explore how changing rates of residential infill coupled with longer-term trends in per capita VMT (vehicle miles of travel and transit and bike-pedestrian use will affect projected vehicle-based CO2 emissions by 2020 and 2030. For example, a preliminary analysis of Los Angeles and Orange counties reveals that if rates of infill development and VMT per capita levels were to continue at their 2010 levels, vehicle-based CO2 emissions...
will decline by about 21% by 2030 compared to 2010 levels. Should infill development rates in the Los Angeles region grow by 50%, and current trends toward reduced VMT per capita continue, and average vehicle mileage climb to 40 miles per gallon, vehicle-based CO2 emissions would decline by as much as 48% by 2030 compared to 2010 levels.

Our second “back of the envelope” model will draw on available building energy use data (as published in the Department of Energy’s metro-specific RBECS and CBEC surveys, and if available, the EPA’s EnergyStar building database) to explore how increased rates of adoption of energy-efficient designs, materials, and control technologies in the residential and commercial building stock might reduce building energy consumption by 2030. This model will be twinned with projections of increased fuel substitution toward natural gas and renewables (as mandated by the President’s Clean Power initiative and state renewable portfolio standards) to estimate the CO2 emissions reduction potential of more energy efficient buildings. These estimates, like those generated by the previous model, will be driven by metropolitan area-specific projections of household and employment growth and locations.

When combined, the results of both models should provide a reasonably accurate and representative picture of how and where the current federal policies with local growth and development trends, if allowed to play out—or perhaps nudged along—would lead to substantial reductions in greenhouse gas emissions by 2030.

Planners have long argued that locally-enacted spatial development policies, investments in alternative transportation modes, and building energy conservation standards could go a long way to reducing CO2 emissions. This paper will explore how large those reductions might reasonably be in the context of real and contemporary places, trends, and policies.

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Abstract Index #: 725
**DOES TOD NEED RETAIL?- RETAIL EMPLOYMENT NEAR**
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Individual Paper

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Transit Oriented Development (TOD) has become the dominant planning paradigm for developing the land around transit stations. Core to the idea of TOD is a retail core wrapped around the station, surrounded by residential. However, the actual performance of retail near transit stations is erratic. This paper analyzes retail employment near light rail stations in 11 different metropolitan areas to determine if the Retail Trade Industry, as measured by retail employment, benefits from proximity to light rail transit. Results show that few places do, although notable exceptions exist. The mis-application of the TOD concept from a greenfield/redevelopment context to an infill context. This calls into question the appropriateness of zoning for retail near most transit stations.

Abstract Index #: 726
**TRAFFIC CONGESTION, ACCESSIBILITY TO EMPLOYMENT AND HOUSING PRICES: A STUDY OF SINGLE-FAMILY HOUSING MARKET IN LOS ANGELES COUNTY**
Central theme and hypothesis:
In standard urban economic theory, transport access to jobs is usually considered one of the most important locational determinants of housing price (Alonso 1964). Traffic congestion is closely related with access to jobs, but has not been often examined in previous empirical studies on residential structure. This study estimates the extent to which costs of congestion delays are valued by households in their residential location decisions by exploring the relationship between traffic congestion, accessibility to jobs and their effects on housing prices. The central hypothesis is that traffic congestion will negatively impact housing price by constraining the accessibility advantage of locations at the regional level and increasing traffic density at the local level, all else equal. Mover, we expect that households in different neighborhoods value access to jobs and congestion differently, given their differences in the opportunity cost of commuting time and desire for housing space. The study uses the single-family housing market in Los Angeles County as an example.

Approach and methodology:
This study uses the hedonic price model to examine the effects of access to jobs and congestion on single-family housing prices within Los Angeles County. The basic model specifies housing prices as a function of housing structural characteristics, transaction years, accessibility/congestion levels, and other neighborhood-level control factors, including local traffic density, socio-economic characteristics, land use characteristics, and local school quality. Considering that more accessible locations are also more likely to be congested and measures of accessibility and measures of congestion could be highly correlated, we follow Graham’s (2007) approach and estimate congestion effects indirectly by constructing two groups of accessibility measures, one associated with free-flow travel time and the other with congested travel time, estimating two separate price models using the two measures and comparing the implicit prices of the two measures. The basic assumption is that if congestion matters, the congested travel-time-based measure would be a better predictor of housing prices.

We use the hierarchical linear modeling approach to deal with the spatial autocorrelation problem among houses located within the same neighborhood. This approach allows housing structural characteristics and locational characteristics, which are aggregated at different geographic scales, to be considered simultaneously (Giuliano et al. 2010; Moulton 1990). To account for the housing market segmentation, we extend the basic two-level linear model to a three-level linear model, where the third level is defined by groups of neighborhoods of similar income levels based on the aggregate information on residents. The effects of accessibility/congestion are allowed to be random at the third level to examine whether and to what extent households of different income groups value access to jobs and travel time savings differently.

Relevance to planning practice:
This study aims to add to empirical evidence on the economic impacts of congestion by focusing on the spatial distribution of housing prices and accessibility at the intrametropolitan scale. The results indicate that implicit price on the accessibility measures measured with congested travel time yields higher marginal price, which suggests that households are more responsive to peak-hour travel time. The results also suggest that the effects of job access are more valued by home buyers in middle-income neighborhoods, compared with those in the lowest income or highest income neighborhoods. Neighborhood-level dis-amenity effects of congestion, measured by local traffic density, are not significant once the effect of accessibility is controlled. In sum, the results support our main hypothesis that traffic congestion plays a significant role in constraining the accessibility premium in housing prices. The findings of this study may provide useful implications for how we think about congestion in urban transportation and land use planning.

References
Use of alternative modes of transportation (public transit, walking, and cycling) is assumed to be less popular partly because of their relative slower speed and longer travel time as compared to car travel. Because most travel surveys only collect information on trips taken during a day, few opportunities exist to actually compare access time by different modes for the same trip origins and destinations. Such analysis can help establish thresholds below which modes compete favorably with respect to travel time.

The objective of this paper is to assess the relationship between frequency of use of various modes, travel time by modes and trip distance for trips linking home to University. A comparison of reported travel time and travel time difference for pairs of trips linking home and University campus by different modes is conducted for respondents reporting using a variety of travel modes during the year to access a University campus.

A campus travel survey of students and employees was conducted at the University of Quebec in Montreal in March 2014 (n=4182). The survey included questions on mode use frequency during the past year, travel time by modes used to access campus, travel distance (through geocoding of postal codes or nearest intersection to residence and street network distance calculation) and socio demographic characteristics. Analysis of variance for travel times by frequency of use and by categories of travel distance enabled the observation of associations between travel time, frequency of use and distance categories for trips conducted using different modes. Pairwise t-test on travel time differences for pairs of modes was used to assess average variation in travel time depending on modes used. Finally, Ordinary Least Square (OLS) regressions on the factors associated with travel time differences for pairs of modes are conducted using personal characteristics, student or employee status at the University and distance from residence to the University.

As the frequency of use of automobile increased, travel time by auto increased. The inverse relationship was found for walk and cycling time in relation to frequency of use. For example, for walking, users declaring always walking have an average travel time of 21 minutes, while those rarely walking require on average 59 minutes to get to campus by walking.

For the same individual taking the same home to University trip, car travel is on average usually shorter than bike, walk and transit travel time (respectively by 11, 30 and 14 minutes), but transit does not significantly differ from bicycling time (29 minutes average travel time for both). These mean differences obscure the fact that depending on home to campus distance, differences can be close to null, or even in the opposite directions than expected.

To assess thresholds where alternative modes become competitive with automobile travel, OLS regression estimates of travel time difference by pairs of mode are used to compute thresholds below which active travel modes and public transit are time competitive with automobile travel and with each other. Network distance
from residence to University is the main significant explanatory variable in most models. For shorter distances, the travel time difference is shorter, and increases as distance to campus increases.

Although access mode to campus is largely stable across the year and highly oriented towards public transit use, a large share of participants did use various modes for home to University trips and their frequency of use of any given mode was associated with the mode’s travel time. Distance thresholds below which alternative modes can become competitive can serve to advocate for student and staff housing in proximity to campus as well as end of trip facilities for active modes.

References


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MEASURING TRANSPORTATION INEQUALITY
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Individual Paper

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Historically transportation planning in the United States has focused on promoting mobility as its central principle. Extensive investment in highways and roads and promoting car as the centerpiece of the American Dream have created hypermobile communities. Benefits of mobility have environmental costs as well as social costs. High mobility levels cause disadvantaged individuals who are financially, culturally or physically restrained in increasing their mobility patterns to become even more disadvantaged (Handy, 2005). Transportation systems can provide some with high levels of mobility and freedom while preventing others from accessing essential activities to fully engage in society. Therefore transportation planners need to not only focus on mobility but also take into consideration the social context of transportation. There are currently not adequate measures to address social issues including transportation inequality. The FHWA is developing guidance on new performance measures to evaluate the impact of transportation funding given to the states, and among this will be measures of social disparity. The main objective of this study is to develop a set of measures and indices that assist in evaluating and studying transportation inequality with an application in Los Angeles County.

Transportation inequality is a concept with many components. It can refer to the unfair distribution of costs and benefits of transportation systems including but not limited to governmental subsidies in favor of private vehicles versus transit; unfair burden of transportation projects on low income and minority communities through the disparate distribution of traffic externalities; and, unequal participation of communities in decision making processes, among others. Unequal access is also an important part of the inequality problem mainly because it can exacerbate social exclusion. Transport related social exclusion is defined as the process by which people are prevented from participating in the economic, political and social life of the community because of reduced accessibility to opportunities, services and social networks. In the United States, concerns about providing equal access to social and economic opportunities has mostly centered on the issue of access to employment, health care, and food (Hansen, 1959; Blumenberg & Ong, 2001; Guagliardo et al., 2004; Walker et al., 2010). The main
gap in the existing literature, however, is the lack of multidimensional indicators of accessibility from a social exclusion point of view and indices to measure unequal distribution of these indicators across communities. This is the focus of this paper.

This paper is organized in 2 sections. The first section is dedicated to developing a set of indices of transportation inequality. Statistical correlation studies and GIS tools are utilized in this step to develop alternative composite indices to measure access and how it is distributed across different population groups. The second section tests developed indices in evaluating policies. To do so the County of Los Angeles is selected as a case study before and after implementation of Measure R projects. Measure R is a half-cent sales tax for Los Angeles County to finance new transportation projects and programs, and accelerate those already in the pipeline. Primary sources of data utilized in this study include Bureau of the Census, American FactFinder, Census TIGER files, Census Transportation Planning Package, Longitudinal Employer-Household Dynamics, OpenStreetMap, California Household Travel Survey, Metro’s Official Blog of Transit Data and Technology, SCAG GIS library, and GoogleTransitDataFeed.

I expect to have a set of inequality indices at the end of this research that can expose strengths and weaknesses of a policy such as Measure R in alleviating transportation inequality and social exclusion. These multidimensional indices can highlight which areas of the county do not have sufficient access or which services are not accessible enough yet. This will help planners and policy makers to recognize areas in need of further attention and guide funding priorities.

References

Considerations of protected lands cannot stop at the official borders of those lands. Bordering communities support the lands, and the lands support those communities. In these symbiotic relationships, residents of gateway communities provide a service to land managers when they work on the lands and locally serve visitors to those lands by providing lodging, supplies, and dining. In turn, residents benefit from the power of protected lands to attract tourism to the local area.

Transportation issues fundamentally transcend the boundaries between protected lands and gateway or inholding communities. Roads link these spaces, and public transit serves both people and places in both realms. Planning transportation in and around protected lands requires attention to the many stakeholders who feel the effects of transportation decisions.

Proactive communication can generate support for alternative-transportation initiatives. The need for communication between protected areas and gateway communities emerges when transportation services cross boundaries, but collaborative partnerships and planning processing involving local stakeholders can contribute to joint financing schemes, land use supportive of transportation initiatives, and strategies for disseminating public information (Dunning 2005).

For many public lands, the greatest traffic congestion and related safety issues occur in internal parking areas and at entrance gates. Coordinating transportation planning in conjunction with gateway communities can help alleviate these internal problems by considering both the resources of a larger area and the full travel needs of visitors. If alternative transportation systems can keep private vehicles from entering public lands, congestion points dissipate. Keeping private vehicles away from entrance gates requires encouraging visitors to choose alternative transportation outside the border in gateway communities. How locals represent and endorse alternative transportation systems to tourists can significantly impact the degree to which visitors use alternative transportation. Gateway communities are critical partners in transportation systems.

This paper examines strategies for land managers and community leaders to encourage collaboration in planning, supporting, and using alternative transportation systems. Many of the documented strategies have covered cases in the United States although this paper has incorporated international references where available. To date, two key reports have assessed how public-land managers can best engage and interact with gateway communities.


These reports, which are freely available on the internet, offer strong reference material for land managers. The documents provide observations and analysis from case studies for interaction among public lands and gateway communities.

This paper conflates, classifies, and elaborates on the findings of these reports, incorporating information from other sources within this structure. Subsections of this paper have explored characteristics of gateway and inholding communities as well as techniques and considerations for engaging local stakeholders.

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Abstract Index #: 731

EXPLORING QUALITY OF SERVICE OF BRT AND CONVENTIONAL BUSES IN INDORE, INDIA: AN APPLICATION OF IMPORTANCE-PERFORMANCE ANALYSIS

Abstract System ID#: 416
Individual Paper

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Bus rapid transit (BRT) systems have gradually become popular worldwide during the past few decades. Transit planners expect BRT to attract choice riders and reduce the growth of congestion through providing high quality service such as reliability and safety. According to the service marketing literature, quality of service includes two key characteristics, namely “user-perceived performance” (satisfaction) and “importance”. As a combined approach of these two dimensions, Importance-Performance Analysis (IPA) has been widely used to identify service attributes with a high importance but low performance, which need to be prioritized to improve. However, the traditional measurement on explicitly-stated importance of service attributes can be misleading since it assumes that satisfaction and importance are independent and symmetric. This study presents an analytical procedure to identify a more accurate measurement on importance: implicitly derived importance. We develop a trivariate ordered probit model on survey data for three types of transit services (BRT, conventional bus, and para-transit) in Indore, India to modify the importance measure in traditional IPA. We present an Implicit Importance–Performance Analysis (IIPA) and compare with the traditional explicit IPA. The traditional IPA
for BRT demonstrates that no attributes fall in the “high importance but low performance” quadrant. When we employ IPA, travel time, hours of service, and ease of use are low in performance but high in importance. Thus, they are the attributes that need to be prioritized within a concentrated budget. To understand the competitive advantages of BRT systems, we will also conduct comparative IPAs for conventional bus and para-transit. Overall, we expect this new approach will offer a more accurate understanding on transit service quality improvement priority.

References

Abstract Index #: 732
THE ROLE OF NATIONAL POLICIES ON LOCAL SCHOOL SITING, SCHOOL TRANSPORT AND OPTIONS FOR CHILDREN’S TRAVEL TO SCHOOL IN THE UNITED STATES AND UNITED KINGDOM
Abstract System ID#: 444
Individual Paper
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Background:
Recent studies throughout the world show a decline in the rate of children walking and bicycling to school and its impact on educational outcomes and children’s health. Much of the research on change has focused on national policies to increase the rate of bicycling and walking resulting from programs, such as, the Safe Routes to School, to increase the level of walking and bicycling. Yet, studies of the choice of mode to school consistently show that the distance to school is among the greatest predictor of children’s mode of travel to school. The travel distance to school is a function of the relationship between the location of residences and schools. This seeks to understand the role of national planning policies related to land development, school location, and school transportation to understand how they are implemented at the local level and influence the travel choices of families.

The policy environment for schools, land development and school transportation has been changing in both the United States and England. After many years of decline in school-aged population, immigration from Eastern Europe to the UK is placing pressure on many local governments to provide additional school capacity. The UK has historically had very strong policies requiring land development within existing urban areas. However, the land development regulations have recently been changed to allow development outside of developed areas. In addition, national policies have begun to support the creation of academies, which use public funding for the private sector to build and manage school. In the US, the policies on land development, school siting and children’s travel are largely regulated at the state and local level, but are strongly influenced by industry standards regarding school site size. In recent years, the school closures have taken place in central cities while schools continue to be built at the urban fringe. At the same time, the fiscal constraints on local government finance may be changing the decision-making about where schools are located and whether new schools are built at the urban fringe.

Study Design:
This research will use a case study of school and transport planning in England and the US to understand the interaction of these policies including a review of national legislation, local programs and interviews with
planners, and other professionals engaged in activities to make decisions about school location and school transport. In order to understand the challenges associated with these changes, current national legislation related to school location, school transport, and children's travel and local policy implementation in several local governments are reviewed and interviews were conducted with local government officials in these areas to understand how the national policies are implemented at the local level.

Primary & Expected Result:
The initial analysis suggests mixed results in the UK; school sizes are smaller and serve smaller geographic area but, in some contexts, mostly rural areas, parents may need to drive their children to school where they would not be required in the US. However, local governments have the responsibility to provide transport services even though they have little control over the costs.

Relevance of work to planning education, practice, or scholarship

The system in England can be seen as an example of an unfunded mandate. Yet, local governments are innovating in a variety of ways. The results can be used to understand options for local governments and school districts in the US to think about how to respond to federal and state education mandates can have a significant impact on local government operations and costs.

References


Abstract Index #: 733

BIKESHARING EFFECT ON TRANSIT RIDERSHIP: A TIME-SERIES ANALYSIS OF THE CAPITAL BIKESHARE PROGRAM (CABI)

Abstract System ID#: 458

Individual Paper

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Bicycle sharing programs continue to increase in popularity and gain attention for the ability to achieve environmental, health, and equity benefits for the communities. Another largely accepted benefit of bikesharing programs includes their positive impacts on transit ridership by extending transit catchment area and providing last/first-mile connections. Thus, locating bikesharing stations near transit stations can be an effective way of integrating both modes, encouraging more bicycling and transit usage. However, the question of how and to what extent bicycle sharing programs affect transit ridership remains to be answered despite the attempts of few empirical and quantitative studies. Among the studies investigating the relationship between land use and transit use, direct ridership models (DRM) have been widely used. DRM is a sketch-up tool that is typically used for estimating ridership as a function of station built environment, transit service, and socio-demographics. It
provides ridership estimates without relying on mode choice from large-scale traditional travel demand models (Cervero, 2007; Cervero, 2009; Gutiérrez and García-Palomares, 2011; Kuby, Barranda, and C. Upchurch, 2006). However, to date, the efforts to study the linkage of bikesharing programs and transit uses have been limited. Only few recent studies considered bikesharing usage as a factor in the DRM analysis (Rixey, 2013; Zhao et al., 2014; Martin and Shaheen, 2014).

In this paper, we will examine impacts of the Capital Bikeshare (CaBi) program on Metrorail transit ridership applying DRM. Established in September 2010, CaBi offered the largest bicycle sharing service in the U.S. at the time. Over the past four years, CaBi expanded the coverage areas to nearby Virginia and Maryland, with a network of over 300 stations in four jurisdictions. The expansion of bikesharing programs over time provides an opportunity to study the relationship between bikesharing and transit usage both spatially and temporally. We will gather data for 86 metrorail stations from a variety of sources including Washington Metropolitan Area Transit Authority (WMATA), U.S. Census, National Center for Smart Growth (NCSG) data inventory, and Washington D.C. Department of Transportation (DDOT). Data are categorized by bikesharing program usage, transit service characteristics, station built environment features and social-demographic variables. Data for CaBi has been obtained from CaBi and DC GIS websites. In order to fully understand how CaBi affects transit ridership overtime, time-series regression models will be developed. Ridership data of the CaBi program and transit will be collected for years 2010 to 2014. The results of this analysis can provide insights on the relationship between bikesharing programs and transit. Potential policy implications regarding CaBi program expansion and the integration of bicycle and transit will be discussed.

References


Abstract Index #: 734

A HEDONIC SPATIAL PANEL APPROACH TO ESTIMATING THE IMPACT OF NETWORK ACCESS TO BIKE AND PUBLIC TRANSIT FACILITIES ON HOUSING PRICES

Abstract System ID#: 479

Individual Paper

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Urban economists and planners have largely accepted the notion that increased proximity to transportation facilities positively impacts the market value of a housing unit by providing the household with greater access to activity locations. Yet, outside of the oft-studied relationship on housing price and proximity to transit stations, there has been limited empirical study of how an increased proximity to bike facilities influences the sales price of a house. Moreover, the findings from studies into the housing price benefits of public transit station proximity have yet to establish any consensus due to the adoption of widely varying and insufficient methodologies. In response, this study develops a hedonic spatial panel modeling approach to estimate the added housing value of improved network proximity to bike lanes and multi-use paths as well as light rail and streetcar stations in the City of Portland, Oregon from 2002-2013. The application of this framework advances the evidence base by offering the first hedonic analysis of bike infrastructure to utilize a longitudinal dataset in addition to conducting
an assessment of the joint influence of bike and transit proximity on housing sales price. The results of this research reveal that housing value was significantly and positively related to increased proximity to light rail or streetcar stations and may also be positively influenced by proximity to bike lanes or multi-use paths. Given the new findings highlighted by this methodologically innovative study, innovative transportation infrastructure financing mechanisms, particularly those that rely on rising property values may be better informed.

References


THE INFLUENCE OF REGIONAL GOVERNANCE STRATEGIES ON TRANSIT PERFORMANCE AND SERVICE QUALITY: MULTIPLE-CASE STUDY OF U.S. TRANSIT SYSTEMS

Abstract Index #: 498

Individual Paper

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The ongoing decentralization of U.S. metropolitan regions has a significant impact on public transportation planning. One of the common challenges faced by planners is providing adequate coordination of transit services across multiple administrative boundaries intersecting contiguous urbanized areas (Meyer et al, 2005). Specific jurisdictions often have divergent transportation needs and different attitudes towards collaborating with their peers on designing and financing transit services. In some cases, these disparities restrain certain municipalities from regional cooperation, or prevent larger agencies from expanding their services to the outlying areas. Consequently, multiple models of regional transit governance and various degrees of system integration exist across the nation’s urbanized regions. These models range from full integration of all transit services within the entire region, to cases where multiple, partitioned, and poorly connected systems operate in adjacent jurisdictions (Iseki et al, 2011). This paper investigates the relationship between the adopted governance strategy and key indicators of transit service and performance, measured at the regional level. The primary objective of this research study is to identify most successful regional governance mechanisms in the terms of their effects on transit agencies and riders.

This study utilizes service quality measures (e.g. accessibility, travel time) as well as performance indicators (e.g. ridership, operating costs). A combination of descriptive statistics and regression analysis is employed to explore the dependence between the adopted governance model and certain types of transit outcomes. It also includes a brief policy overview, identifying and categorizing specific governance mechanisms and investigating their emergence and functioning over time. A combination of quantitative and qualitative results serves as a base for drawing additional insights on best practices in regional transit governance. All urbanized areas with population between 500,000 and 5,000,000 are included in the study, and for each of them, annual observations for the 2001 – 2013 period are considered.

This research aims to inform the planners and scholars whether adopting certain types of regional collaboration could improve the outcomes of transit in the terms of higher ridership and modal share, efficiency, as well as other common objectives of public transportation. Very few evaluations of various types of regional transit
governance models were conducted in the past, and most of them were focused on descriptive discussion of specific regional transit governance mechanisms. Quantitative assessments, if any, were limited to only a few cases (Jaroszynski, 2014). This research intends to fill that gap and bring new lessons on the influence of governance models on region-wide transit performance and attractiveness, and on best practices in facilitating collaborative transit planning within America’s metropolitan areas.

References

Abstract Index #: 736
LESSONS FROM MXD TRAFFIC IMPACT ANALYSIS OF TOD PROJECTS USING ENVISION TOMORROW SOFTWARE
Abstract System ID#: 507
Individual Paper
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The benefits of transit-oriented development (TOD) along public transit projects are well-studied; with several studies indicating that TODs have substantial land use impacts in addition to effects on vehicle miles travelled (VMTs), levels of congestion and mode shifting. A study in Austin (Zhang, 2010) using a four-step travel demand model simulated traffic outcomes for TOD scenarios and found a 10-12 million reduction in VMTs. Another study in Portland, Oregon, suggests that new residents of TODs reduced their vehicle ownership by about 30% and increased their public transit use by almost 70% after relocating (Podobnik, 2002).

The ITE has a trip generation methodology that is common usage for traffic impact assessments, including an updated version that take New Urbanist type influences into account. However, because these methods ignore characteristics like density, land use diversity, pedestrian-oriented design, destination accessibility, distance to transit, and residents of development, it has been asserted that it does not fully capture the traffic impact of built environment. A review of eight smart growth trip generation methods found that all are more accurate than ITE approach (Shafizadeh et al., 2011). Among them, the Ewing et al. (2011) study methodology produces the best estimate for seven of the 22 sites used for validation.

Recently, Envision Tomorrow (ET+) scenario planning support system has become widely used in Austin. Projects using this scenario planning software include the Sustainable Place Project, Project Connect (a LRT proposal impact assessment) and CodeNEXT (a re-write of the Austin land development code to implement its new comprehensive plan). As a GIS-based tool suite for scenario planning, ET applies Ewing et al. (2011) study methodology as the basis for its trip generation and traffic impact assessment for study areas under two square miles.

Building off of previous research on the impact analysis of Project Connect, our study discusses the pros and cons of ET+ approach for mode shift and trip generation aspects of TOD projects. By consulting with City of Austin, the authors modeled over 50 project-specific building prototypes to feed into ET+ scenarios for the year of 2030. Two scenarios are modeled: 1) A ‘No-Build’ scenario in which a high capacity transit line is not built; and 2) A ‘Build’ scenario in which a high capacity transit corridor is built. The study area is a 9-mile long corridor that stretches from East Riverside Drive in South Austin to the Highland Mall area in North Austin, intersecting the eastern portion of downtown Austin.
After modeling development scenarios using ET+, the mixed-use district (MXD) transportation model (Ewing and Cervero, 2010) was applied to the land use scenarios in order to generate additional transportation benefit estimates such as per capita VMT, share of walking and transit trips, transportation emissions, and monthly transportation costs. For further understanding the impact assessment using ET+, three subareas were identified - East Riverside, Highland Mall and Downtown Area, and one comparison analysis examines the strength and limitation of this approach. While this research is on-going, our preliminary findings show that while the model was useful in low transit service zones along the proposed rail line, its utility was more limited in areas already served by other modes of transit such as bus and BRT. The model is not sensitive to the impact of high capacity transit as opposed to more traditional bus, in comparison with the impact of increased densification and TOD land use. We discuss possible work around until future research allow for more precise differentiation of transit type impacts in MXD TOD situations with pre-existing service.

References


Abstract Index #: 737
THE EFFECTS OF THE BUILT ENVIRONMENT ON DRIVING EMISSIONS IN METROPOLITAN AREAS IN THE US
Abstract System ID#: 512
Individual Paper

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Growing concern over climate change has led to increasing interest in the role that the built environment can play to cut down greenhouse gas (GHG) emissions. Many studies have reported that compact and mixed-use developments reduce vehicle miles of travel (VMT). Others, however, argue that densification and mixture of land uses can result in slower vehicle movements, and consequently generate more driving emissions. The net effect is thus unclear. Methodologically, VMT is only a proxy, not an exact measure of emissions. This research aims at improving understanding of the relationship between the built environment and driving emissions.

The study will utilize the 2009 National Household Travel Survey (NHTS) data to examine variations in the built environmental characteristics and emissions among metropolitan areas in the U.S. The NHTS includes detailed information about the surveyed individuals’ trips and activities, as well as demographic and socio-economic characteristics and vehicle information. Moreover, the NHTS add-on data include more detailed location information about origins and destinations, which can be analyzed in conjunction with land-use data from other agencies. The trip information will be utilized to estimate emission factors by the Motor Vehicle Emission Simulator (MOVES), which is an emission modeling system developed by the Environmental Protection Agency (EPA) to estimate various types of air pollution emissions from mobile sources. Using MOVES the study will estimate GHG emissions considering vehicle type, age, speed, and cold-starts, in addition to VMT. By employing structural equation modeling (SEM) techniques, this study describes how each aspect of the built environment affects travel (e.g., distance and speed) and associated emissions.
This study is a part of my dissertation research.

References


Abstract Index #: 738

REDUCING VEHICLE TRAVEL FOR THE NEXT GENERATION: LESSONS FROM THE 2001 AND 2009 NHTSS

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Background

The total number of Vehicle Miles Traveled (VMT) in the U.S. reached its peak in 2007 and has continued to decline (Polzin & Chu, 2014). Studies utilizing the National Household Travel Surveys (NHTSs) show that young people, between the ages of 16 and 35, led to the meaningful decrease in vehicle travel (Santos et al., 2011). This recent decrease is partly due to the increasing role of transportation alternatives (i.e., walking, cycling, and public transit) technology (e.g. telecommuting) on travel (Mans et al., 2012).

Research Questions

Two specific questions are asked in this study. First, how travel behavior differs across different age groups over time, and second, how the aforementioned factors affect the number of miles driven, and how the role of these factors in travel varies across different age groups.

Data/Method

Utilizing multi-year NHTSs, this study examines the impacts of the use of transportation alternatives and telecommuting on person vehicle miles of travel by age group over time. In order to capture the variances in the impacts of each factor on the number of miles driven across different age groups, this study employs a segmented regression method, also known as a piecewise regression, in which age groups were used as breakpoints.

Results

The results of the regression analysis show that policies regarding public transit service can be more effective for the 16-26 and 27-44 age groups to reduce vehicle travel. Additionally, improving the facilities for walking in favor of the 45-63 age group can enhance policy effectiveness on VMT reduction. The effect of ICTs to reduce vehicle trips is still unknown.

Conclusion

The findings of this study support the idea that improving public transit service and walking facilities in favor of specific population subgroups can enhance policy effectiveness. These factors are also expected to play an important role in reducing vehicle travel demand in the future.
References


Abstract Index #: 739
SOCIAL WELFARE ANALYSIS OF INVESTMENT PUBLIC-PRIVATE PARTNERSHIP APPROACHES FOR TRANSPORTATION PROJECTS
Abstract System ID#: 522
Individual Paper

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This paper has two objectives: (1) to introduce a new approach to gaining widespread support for comprehensive road pricing; and (2) to develop a detailed social welfare analysis for road pricing schemes. We first describe a new approach to garnering support for system-wide road pricing, which we refer to as an investment public-private partnership, or IP3. This approach returns a significant portion of the economic value created by road pricing back to its citizen-owners. Next, we present a social welfare framework that estimates the benefits and costs of using the IP3 approach on an urban transportation network. Policy makers typically evaluate public-private partnership (P3) projects using Value for Money (VfM) analysis. However, a P3 project’s impact on overall social welfare provides a more comprehensive evaluation criterion. Apart from several theoretical studies, a detailed social welfare analysis that includes all major P3 project stakeholders is lacking. Using Fresno City’s transportation system as our case study, we show that system-optimal tolling scenarios favor average users, but that government—and consequently taxpayers—would pay for costly tolling systems. In contrast, unlimited profit-maximizing tolls raise substantial profits for government, for the infrastructure’s citizen-owners, and for the private sector, but the average user is worse off. From a social welfare perspective, one should search for a Pareto-improvement under which all major stakeholders are better off. Our estimates indicate that a mixed private and public tolling scheme offers such an improvement. A mixed scheme results in the highest social welfare among all scenarios unless the weight placed on motorists’ (i.e., transportation users’) welfare is very low or the weight placed on residents’ welfare is very high relative to the weight of other stakeholders.

References


Abstract Index #: 740
MISSED BY THE MERCHANTS: PERCEIVED AND REPORTED CHOICE OF TRANSPORTATION MODE ON A COMMERCIAL STREET
Alternative modes of transportation, i.e. walking, bicycling, and public transit are becoming increasingly popular in the United States. Recent changes proposed by Transportation Research Board to revise the concept of level of service will help planners to model for road diets, which are interventions to street configurations improving the infrastructure for pedestrians and bicyclists, such as adding bike lanes and wider sidewalks (Henderson 2011). Combined with related state policies such as SB 375 in California, Sustainable Communities Initiative, and county wide policies such as Complete Streets Initiative in Los Angeles County, those improvements to pedestrian, bicycle and public transit infrastructure are imminent in most cities. These improvements are also argued to be good for business although there is little evidence to support this argument. The purpose of this study was to examine the business owners’ perception of their clients’ transportation mode, and residents’ and visitors’ self-reported transportation mode on such a commercial street. A total of 420 questionnaires were conducted with the residents living within 0.25 mile of the commercial street; 100 surveys were administered to the randomly selected pedestrians on the commercial street; and 99 businesses were selected randomly to be surveyed. Of the 420 residents 74% reported walking and 25% reported biking regularly to the commercial street. The findings show that the most frequently visited businesses by these residents are restaurants and grocery stores. Similarly, of the 100 visitors, 40% reported coming to the commercial street on foot or by bike, and 25% reported using public transit. However, the business owners perceive that only 13% of their customers are bicyclists and pedestrians, and specifically restaurants perceive that only 20% of their customers are bicyclists and pedestrians. Such a gap between business owners’ perception of their customers’ mode of transportation and the mode of transportation reported by the residents and the visitors is the potential point of tension for improving pedestrian, bicycle and public transit infrastructure.

References

GHETTOS OR ENCLAVES? EVIDENCE ON SOCIAL NETWORKS BASED ON A RELATIONSHIP BETWEEN ETHNIC COMMUNITY RESIDENCE AND EXTERNAL-HOUSEHOLD CARPOOLS

As racial segregation has been a persistent issue over the past several decades, understanding its impacts on the travel behavior of minority groups becomes crucial. While several studies have investigated the relationship between an ethnic enclave residency and immigrant travel behavior, the impact of residence in ethnic communities on African-Americans’ travel behavior has rarely been discussed. Hence, in connection with a theoretical discussion on ethnic enclaves and ghettos, I compare the impact of residence in Black communities on African-American travel behavior with the impact of residence in ethnic enclaves on immigrant travel behavior. Specifically, using the 2010-2012 California Household Travel Survey, I investigate whether living in an ethnic community increases the probability of carpooling with non-household members among African-Americans, as well as among immigrants. The multinomial logit results show that living in an ethnic enclave increases the probability of external carpooling among Asian/Hispanic immigrants, while this does not hold true for African-Americans. Given the similar socioeconomic status between African-Americans and immigrants, this result
implies weaker ethnic networks among African-Americans residing in African-American communities compared to those of immigrants living in ethnic enclaves. Therefore, this study adds to further evidence that living in African-American communities might be an involuntary choice of the residents, whereas immigrants are more likely to self-select to live in their co-ethnic communities.

References

STUDY ON IMPACT OF URBAN FORM ON AIR QUALITY IN CHINA: BASED ON PREFECTURAL LEVEL CITY ANALYSIS

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Abstract: Recently a large scaled, long duration and highly polluted haze emerges in China, which raise research interests from both scholars and decision makers. Accumulated researches on haze in China focus on the sources, emission process and the weather condition for pollutants transformation. Since 1970s, the scholars in western countries began to shift to the impact of urban form factors on air quality, which highlight that good urban planning policy will benefit the air quality and public health in the long run. This paper tries to approach from the perspective of urban form, and adopts regression model with control variables to evaluate the impact of urban form factors on haze, with data from China City Year Book and China Environment, Economics and Energy Data Set from 2001-2011. The results shows that small city with population less than 200,000, city outside of the central heating area, and city in the east has lower PM 10 level. It also reveals more significant spatial auto-correlation pattern from 2003 to 2010. After control the scale, heating and east cities, it finds that secondary industry share, polluted industry scale, industrial consumption, population density and built-up area have significant negative influence on air quality, while on the contrary public transit provision, green space and clean energy consumption have significant positive influence on air quality. The results provide implications for urban planners that policies toward good urban form help to promote the air quality and public health in the future, such us optimizing land use structure, promoting public transit oriented development.

STUDY ON SYNERGY DEVELOPMENT BETWEEN RAIL TRANSPORTATION AND URBAN SPACE IN CHINA

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Abstract: China undergoes dramatically change in process of urbanization and urban spatial transformation in recent years, while rail transportation infrastructure plays an important role on urban extension and urban spatial restructuring. Through reviewing history on rail transportation development, and collecting data by questionnaire
on rail transportation related issues from 16 big cities in three years, this paper tries to evaluate whether rail transportation construction goes coordinate with urban spatial development. It measures the degree of coordination by efficiency of rail transportation related space, social impact of rail transportation structure and spatial influence on urban sprawl. Results show that the transportation space and other affiliate space are currently under low efficiency. While improving the average commuting efficiency, it also lower the accessibility for the dis-advantage group. In many cities, transportation-led development also induce urban sprawl, especially in the new suburban area and new zones. Despite these problem challenging sustainable rail transportation and urban development, this paper provide implications for fast growing cities globally in developing countries. Base on these analysis, suggestions are brought up for the synergy development between rail transportation and urban development in three aspects. First, the connectivity of rail transportation facility to urban space should be promoted. Second, social impact of rail transportation will be further explored. Third, Planning tools should be applied to control transportation-led urban sprawl.

Abstract Index #: 744
SUBSIDIZED HOUSING AND PUBLIC TRANSPORTATION OPPORTUNITIES IN NEIGHBORHOODS: CASE OF THE GREATER LOS ANGELES AREA
Abstract System ID#: 596
Individual Paper

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The neighborhoods and communities in which people live largely affect their various socioeconomic opportunities for improved life outcomes and upward mobility (Crowley, 2003; Ellen & Turner, 1997; Massey & Denton, 1993). Distressed neighborhoods are commonly associated with poor education quality, inadequate access to jobs, and high crime rates; advantaged communities are linked with quality education, high-paying jobs, safety from crime, and healthier physical and social conditions (Squires& Kubrin, 2005; Van Zandt & Mhatre, 2009). These spatial distributions of needs, resources, and opportunities are termed the “geography of opportunities (Briggs, 2005; Galster & Killen, 1995; Van Zandt & Mhatre, 2009).” Place is the key to explaining the ecology of the uneven geography of opportunities – various socioeconomic opportunities and resources are unevenly distributed between and within neighborhoods, hence households have unequal access to those opportunities and resources based on where they live (Briggs, 2005; Galster & Killen, 1995).

Subsidized housing programs in the U.S. aim to provide affordable housing, decent homes, and suitable living environments (Housing Act of 1949). The objective of subsidized housing programs indicates that subsidized housing policies consider the places matter for low-income families. Even though “decent homes” may refer to the quality of housing structure, “suitable living environments” refers to neighborhoods and communities which promote various socioeconomic opportunities for improved life outcomes (Newman & Schnare, 1997; Oakley, 2008). Many studies have found that placed-based subsidized housing programs have provided distressed neighborhoods, especially in terms of poor socio-demographic conditions (i.e., high percentages of low-income households, poverty, minorities, and unemployment), to subsidized households (Freeman, 2004; Kasarda, 1993; Newman & Schnare, 1997; Van Zandt & Mhatre, 2009). However, we have empirically limited understanding as to whether place-based subsidized housing developments promote locational options that offer better public transportation opportunities for low-income families.

This paper address a simple question: do placed-based subsidized housing developments provide public transportation access for the disadvantaged populations, and how does public transportation opportunities in neighborhoods vary by type of federal subsidy (i.e., public housing and LIHTC)? The study area is the greater Los Angeles region, which comprise the Los Angeles CSA. We use data from the Department of Housing and Urban Development (HUD)’s 2010 Picture of Subsidized Households to identity the location of placed-based subsidized housing developments. Also, the 2010 decennial census data and the 2006-2010 American Community Survey 5-year estimates are used to specify the socio-demographic characteristics of neighborhoods. To identify the public transportation access in neighborhoods, we use data on transit stops and stations in the greater Los Angeles area
obtained with permission from the Southern California Association of Governments (SCAG). For our analysis examining the relationships between subsidized households and transit density, we consider a transit stop in neighborhoods as a scheduled stop on every directional fixed-route bus or rail line because transit access can be representative of a proxy for transit service. All data are aggregated to census block group level to identify the subsidized housing, socio-demographic, and transportation access conditions of neighborhoods. We employ two empirical methods, especially the bivariate analysis including descriptive statistics and t-test, and the multiple regression analysis to explore the spatial discrepancies between the location of subsidized households and the transit access in neighborhoods. Our findings will help policy makers understand whether placed-based subsidized housing is developed in neighborhoods where provide better access to public transportation for the disadvantaged populations.

Abstract Index #: 745
HOW MID-SIZED CITIES CAN SECURE INTERNATIONAL FLIGHTS AND STIMULATE ECONOMIC DEVELOPMENT IN THE NEW ERA OF OPEN SKIES AND AIRLINE INCENTIVE PROGRAMS

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The relationship between air traffic and economic development is both undeniable and hard to quantify. Scholars have identified the relationship between economic variables (such as employment and wages) and air traffic at a single airport (such as Brueckner, 2003), across all airports in a region or state (Button, Doh, and Yuan, 2010), or across a nation-wide sample of airports (Green, 2007). While parsing out the effects of international traffic alone on regional economic development is a challenging – if not untenable – endeavor, the correlation is undeniable. Indeed, Button and Taylor (2000) review historical city planning documents and note that the presence of international air service is listed among the top factors that international and domestic firms consider when deciding office and headquarter siting.

Luring air traffic, both international and domestic, has long been in the realm of city officials and planners as operators of municipal airports. As cities have historically maintained a “build it and they will come” mentality regarding their municipal owned and operated airports, airport sponsors have relied on the one tool in their toolkit to promote economic development through their airport: airport expansion (Garrison 2014; Ryerson and Woodburn 2014). Yet expansion is an imperfect – and expensive – tool, as evidenced by the major airports in cities such as Cleveland, Pittsburgh, and Cincinnati that that lost air service after expanding due to the changing business patterns of the airlines that served them. In the past 10 years, two major policy changes have combined to add a second mechanism through which airport sponsors can build their international service with the goal of economic development. The first development is in the form of liberalized bi-lateral agreements across countries which allow international and US domestic airlines to engage in profit and risk sharing for international flights. The second is new policy issued by the Federal Aviation Administration outlining the mechanism through which airport sponsors can use airport funds to incentivize new international service at their airports. These two policy changes have opened the door for cities to court airlines and encourage them to launch new international service. Certainly the expected occurred: the largest metropolitan areas such as New York, Philadelphia, and Los Angeles were successful in luring new international flights to Asian and European destinations. But something less expected, and untested, also occurred: many airports outside of the major metropolitan areas such as Raleigh-Durham, NC, Portland, OR, and Austin, TX were able to attract brand-new international transatlantic or transpacific service.

In the following study, I seek to categorize metropolitan areas and their airports regarding how well they are positioned to secure new international service. To do so, I first identify the major factors that led cities to be successful or unsuccessful in luring and retaining international service. Using statistical techniques I identify the three most critical factors that explain a region’s propensity to have an international flight: the percent of the workforce that is employed in service-level professions; the Gross Metropolitan Product (GMP); and the number of flights during the airport’s peak period. I then use cluster analysis, which is a statistical method that in this case identifies categories of metropolitan areas based on how similar they are on our three factors, to define groups
of metropolitan areas. For each group, I explore how well they are positioned to secure a new international flight based on their employment, GMP, and quantity of flights; their history; and the success or failure of incentive programs and other interventions they have made to encourage service.

References

Abstract Index #: 746
DISTANCES, DESTINATIONS, AND TRAVEL DECISIONS: EXPLORING ACCESS TO PUBLIC TRANSIT FOR OLDER ADULTS IN NEW HAVEN, CONNECTICUT

Individual Paper
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Growth in the number and proportion of older adults is unprecedented in the history of the United States. Longer life spans and aging baby boomers will combine to double the population of Americans aged 65 years or older during the next 25 years (Rosenbloom, 2001; Alsnih and Hensher, 2003). Access and mobility are key concerns. When older adults lose their ability to drive, or cannot easily secure rides from others, they suffer substantial losses in mobility (Rosenbloom, 2003). Inadequate access to transportation for older adults results in lower levels of physical activity, reduced independence, and greater health risks (Hess, 2009; Preston, 2007).

Since older adults drive less frequently and already experience more isolation, barriers to mobility further limit their engagement, participation, and independence. Public rights-of-way (ROW) often create disincentives to walking and pose risk for injury, decreased mobility, and increased isolation among older adults (Maisel, 2014; Lynott et al., 2009). While older adults have poorer access to public transit compared to other Americans, public transit nevertheless plays a substantial role in helping older adults stay mobile.

To extend the current research on challenges that older adults face using public transit, we propose to explore the process of decision making about using transit and various contributing factors, including the distance between an origin and destination, availability of a transit stop or station, walking distance to public transit, presence of sidewalks, and the quality of pedestrian environment (Hess, 2009; Rodriguez and Joonwon, 2003, Zhao et al., 2003). To explore these relationships, we use the 2012 Greater New Haven Community Wellbeing Survey to address the following research questions:

- What are the factors affecting transit ridership for older adults?
- Is public transit a convenient mode of transport for older adults’ daily needs? Why? Or, why not? This survey of 1,307 Greater New Haven Connecticut residents includes 494 respondents age 65 years or older. Using multiple variable regression analysis of survey responses, we explore these complex dimensions of travel for older adults:
- Mind-set challenges: a product of the freedom and independence associated with driving;
Justice and The City: (re)Examining the Past to Create the Future
55th Annual ACSP Conference

• Destination challenges: describing the challenge of getting to desired locations;
• Mobility challenges: connected to the efforts to access various services.

The results of our multiple variable models of older adults’ public transit riding tendencies and decision making will provide insight for transportation policy makers. Our research will suggest policy and spatial areas that require attention and resources to meet the growing travel needs of older adults. The findings will lead to a set of policy recommendations for use in New Haven and elsewhere that include interventions in the built environment and changes in how transit policy makers perceive mobility needs of older adults.

References

Abstract Index #: 747
NETWORK EVOLUTION AND TERRITORIAL TRANSFORMATION IN HONG KONG: AN EMPIRICAL ANALYSIS ON RAILWAY INVESTMENT, EMPLOYMENT LOCATION, AND HOUSING PROVISION
Abstract System ID#: 654
Individual Paper

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Hong Kong is well recognized for its world-class railway and property development (Cervero and Murakami, 2009). In particular, MTR Corporation’s unique land value capture techniques (so-called “Rail Plus Property” or R+P programme) have long been adapted to finance major capital works without government cash subsidies and guide Hong Kong’s territorial development in a sustainable way since the early 1980s (Suzuki et al., 2015). Although the existing literature admits the significant success of MTR Corporation’s transit finance, property business, and town planning model from the past experience, there will be even greater policy challenges with respect to Hong Kong’s network evolution and territorial transformation for the coming decades. Indeed, Hong Kong’s current intracity and intercity railway extension projects, including the on-going “Guangzhou–Shenzhen–Hong Kong Express Rail Link (XRL)”, already requires more governmental funding arrangements, such as, due in large part to the changing nature of network extensions and the lack of developable land around new stations, whereas the latest territorial development strategy up to year 2030 stresses the increased importance of intercity interactions with Mainland China and the growing demand for “Grade A” office and affordable housing properties in enhancing both global competitiveness and local livability along the new railway lines. In response to such network evolution and territorial transformation trend and projection, this study empirically examines (1) changes in both intracity and intercity railway networks and travel times across Hong Kong and Mainland China; (2) a series of MTR’s high-end property developments; (3) provisions of government housing units, rental flats, and shopping plazas within 500 meters of stations; (4) dynamic shifts in employment locations and job-housing balance across 200+ Tertiary Planning Units-TPUs; and (5) increases in MTR’s system-wide ridership and modal share along with network changes, property provisions, and location shifts over the past ten to twenty years. Evidence derived from this time-series geographic data analysis would reveal the economic potential and unintended consequences of major investment in intercity transportation facilities and intracity missing links that could support cross-border interactions and business clusters but might exacerbate the spatial divisions of labor and traffic congestion accompanied by the provisions of high-end commercial properties and affordable housing units within Hong Kong. Specific infrastructure and land use planning implications are drawn not only to Hong
Kong’s railway investment and territorial development strategies but also those for a few selected global cities of the world, including the United States.

References
Much work has examined the costs of travel such as emissions, crashes, monetary expense, and time loss. But, in large part because it is difficult to measure, travel’s benefits are largely understudied. This is a noteworthy lacuna, because without an understanding of these benefits we are not fully informed when examining the impacts of policies to facilitate, reshape, or discourage travel. To date, no studies have looked at individuals’ life satisfaction and its links with overall time spent traveling using a large and representative sample, while also disaggregating by mode and travel purpose. This paper utilizes data from the American Time Use Survey, which in 2012 and 2013 asked subjects to rate the overall quality of their lives. Although there are limitations and caveats involved with such a measure, it has been validated in numerous ways and thus this approach is widely used by happiness scholars. Using ordinary least squares and ordered logit regression, this study finds that, controlling for relevant demographic, geographic, and temporal covariates, the amount of travel time per day is significantly and positively associated with life satisfaction. This relationship is attenuated, but still significant, when time spent participating in out-of-home activities is controlled for, suggesting that more travel helps us to access better-quality destinations, not simply more destinations. Time spent bicycling is strongly associated with higher life satisfaction, though it attains borderline significance only in some models; time spent walking is also positive, though it is not significant. These tentative findings of a link between active travel and happiness may be due to active travel having emotional or health benefits. Life satisfaction is positively and significantly associated with travel for the purposes of eating and drinking, religious activities, volunteering, and playing and watching sports. Travel time exhibits a strong positive relationship with life satisfaction in less populous places, but in large MSAs the association weakens; this may be due to the time or emotional costs of traffic congestion, which disproportionately exists in large cities, or to the fact that many desirable destinations in large cities may be more dispersed. (In this sample, overall travel time is positively correlated with MSA size.) In all, while the associations between travel and life satisfaction are clear, the causal story is complex, with the positive relationship potentially being explained by 1) travel allowing us to access destinations that make us happy, 2) the act of travel itself being fulfilling, 3) intrinsically happier people being more likely to travel, and/or 4) the presence of confounding variables, such as personality traits like extraversion or being open to new experiences, which have been shown to increase life satisfaction and in all probability also increase the propensity to travel. In all likelihood, all four factors are at play, but the evidence here suggests that explanation 1 is a significant contributing factor. In sum, the findings provide support for the proposition that the benefits of travel outweigh its burdens, at least for the individual traveler, and that, despite its very real costs, the provision of transportation resources is very likely facilitating human happiness.
In order to evaluate the effectiveness of investment in public transportation and transit oriented development (TOD), it is important to understand critical factors that affect transit demand at the station level. Recently, Direct Ridership Model (DRM) has been increasingly used to estimate transit ridership demand for its advantage for applications in practice. DRM estimates ridership as a function of the built environment, transit services, and demographic characteristics around station areas, rather than using mode choice model or traditional travel demand model (Kuby et al., 2004; Chu, 2004; Cervero, 2006). The current DRMs based on ordinary least squares regression (OLS) assume the relationships between dependent and independent variables are constant across space, resulting in the average regression coefficients for all the stations. However, the relationships between various factors and transit ridership could vary among stations. Some factors may have a strong prediction power at certain stations and have a weak impact at other stations. GWR can capture spatial variations in the regression coefficients for a given station (Gutiérrez, Javier et al., 2011). GWR can develop as many “spatially adjusted” regressions as there are stations, based on the concept of distance decay (where more weight is given to closer stations than the farther ones). GWR can also predict ridership for a given station if certain land use scenarios need to be tested before implementation.

Washington Metrorail is the largest and most-heavily utilized transit system that delivers more than 1.2 million trips each day to a population of 4.6 million in the Washington D.C. region (WMATA, 2013). It provides economic, social, and environmental benefits that contribute to the region’s vitality. Washington Metropolitan Area Transit Authority (WMATA) is interested in land uses adjacent to its Metrorail stations for several reasons. One of the major goals stated in the WMATA’s Long-range Plan is to reduce overcrowding of trains and stations, for which future land use decisions around the Metrorail stations and related transit ridership change will have substantial implications. In some case, land uses around stations can exacerbate a mismatch between station capacity and usage, triggering the need for capital improvement at certain stations. Finally, increasing walk access to Metrorail can be another effective way to use existing infrastructure more efficiently to generate more ridership and revenue. Development of more fine-tuned DRMs will benefit WMATA for their examination of policy alternatives aiming at reducing overcrowding, balancing the capacity and usage, and increasing ridership and revenue.

In this study, we propose to develop DRMs by using both OLS and GWR approaches. Data for 86 Metrorail stations will be gathered from a variety of sources including WMATA, U.S. Census, U.S. Environmental Protection Agency (EPA), and National Center for Smart Growth (NCSG). Data will be categorized into three groups including: transit service characteristics, station built environment features (density, diversity, design, and accessibility), and demographic variables. In order to better capture the land use patterns around metro stations, a series of “walk sheds” will be created around each station, using the actual walkable network rather than a catchment area “as the crow fly.” Then station built environment features and demographic data will be merged to these “walk sheds.” Results obtained from both OLS and GWR models will be compared. Potential policy implications will be discussed.
IDENTIFYING CAUSES OF TRANSIT AND LAND USE COORDINATION SHORTCOMINGS THROUGH PRACTITIONER REFLECTION

Abstract System ID#: 686
Individual Paper

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Through interviews with more than 50 transit project planners across 19 U.S. regions, I have developed a number of hypotheses regarding why ineffective theories persist in the realm of transit and land use coordination. Many of the planners I interviewed were disappointed in the amount of real estate development that had resulted around transit projects they had planned—particularly when they had advocated for costly transit project design alternatives they believed would foster real estate development (Carlton, 2013). When reflecting with these planners on their practices, I learned that their expectations of real estate development were often based on theories that appeared to be oversimplified and overgeneralized versions of what the academic literature says about the topic.

Planners mostly engaged in rationalization during our conversations, only rarely critiquing the effectiveness of their theories or considering the potential usefulness of alternative theories. While rationalization to avoid culpability or change is common human behavior, Argyris and Schon’s (1974) theory of practice suggests that learning by doing occurs when practitioners avoid rationalization and critically reflect on the effectiveness of their practices. Such “single-loop” learning allows for incremental improvement over time and the attainment of expertise. So, why did transit planners not engage in single-loop learning regarding their disappointment in real estate development around the projects they planned?

These transit planners’ failure to engage in reflective learning appeared to be justified by several institutional factors. For example, federal policy language includes, and therefore validates, many of the oversimplified theories used by planners. Additionally, many planners suggested that our conversation was the first time they had thoroughly considered real estate outcomes. It seemed that the planners had been distracted from any real estate development shortcomings because they had achieved success as transit planners by designing politically acceptable transit investments, implementing land use plans around proposed stations, delivering transit projects, and garnering significant federal transportation funds—goals that appeared more salient in our conversations than land use changes around the projects they helped build. In fact, while federal policies require funding applicants to consider real estate development during the planning phase, federal funding requirements require ex-post evaluations of project costs and ridership but not a performance evaluation of station area real estate development.

For such reasons, I hypothesize that single loop learning in transit and land use coordination will not be accomplished until institutional changes incentivize reflection and allow for adaptation. Until then, the practices that result from oversimplified and overgeneralized theories will persist and continue to hamper transit planners’
ability to achieve their goals of fostering station area real estate development. U.S. transit projects will continue to incur opportunity costs as limited transit capital funds are expended ineffectively.

References

SCOFFLAW CYCLING: BEHAVIOR, INTENTION, AND MULTI-MODAL INTERACTIONS

Bicyclists have an image problem. The popular media, everyday discourse, and even some transportation professionals criticize cyclists for their ignorant or indifferent attitudes toward the “rules of the road.” Seemingly unconcerned with traffic laws that apply to other road users, cyclists run red lights and stop signs, ride in groups impeding motorized traffic, and are generally thought to bring disorder and danger to otherwise safe and orderly streets with their scofflaw behavior. Whether valid or not, portrayals of cyclists as thrill-seekers and outlaws rather than ordinary road users can engender social stigma and resentment among pedestrians and drivers (Daley & Rissel, 2011). This mindset may adversely affect bicycle promotion efforts by increasing barriers to cycling among the general population, or worse, it may incite dangerous conflicts (e.g., “road rage” incidents) between cyclists and other road users (O’Connor & Brown, 2010). Yet, the legitimacy of the scofflaw cyclist trope has not been assessed empirically. We address this gap in the literature in two ways. First, we examine the validity of the “scofflaw cyclist” trope by quantifying and describing the behavior, including underlying behavioral rationales. Second, we explore the broader issues surrounding interactions and conflicts between modes in car-dominated environments and the resulting implications for promoting bicycling.

Central to this research is identifying conflicting perspectives on appropriate behavior across all road users, particularly where normative and lawful bicycling behavior is ambiguous or dangerous. To do this, we use data drawn from an online survey combining stated preference questions with photo-enhanced hypothetical scenarios. Presented with common roadway situations, respondents were asked to take the perspective of a driver, pedestrian, or cyclist, and report: i) how they would navigate the situation; and ii) their rationale for this choice. Scenarios measure willingness to engage in scofflaw behavior and resulting inter-modal conflicts. Respondents were convenience-sampled via email, social media, and the popular press. The resulting dataset includes over 16,800 unique responses from across the United States and Canada.

To examine the validity of the “scofflaw cyclist” trope, we first specify scofflaw bicycling behavior in terms of who behaves in scofflaw ways, in which situations they exhibit these behaviors, and underlying rationales for such behaviors. Findings indicate scofflaw cycling behavior can be grouped along two extremes. At one extreme, there are cyclists that tend toward assertive behavior; such cyclists are frequently perceived as rude and/or reckless by other users, even when exhibiting lawful behavior (Skinner & Rosen 2007). At the other extreme are risk-averse
cyclists. For these cyclists, scofflaw behavior is symptomatic of conflict-avoidance rather than an assertion of spatial dominance in mixed traffic.

Our analysis also addresses issues of multi-modal interactions, conflicts, and implications for bicycle promotion. We find support for the hypothesis that personalities are constant across modes. The absence of multi-modal infrastructure, however, is correlated with reduced cyclist safety (Pucher, et al., 2010) and increased stigmatization of bicyclists (Aldred, 2012), creating an environment that may induce scofflaw behavior. In contrast, risk-prone or risk-averse drivers have the flexibility to behave within their ‘comfort zone’ in auto-oriented environments. Additionally, as scofflaw cycling behavior tends to cluster at opposite extremes, so do driver’s reactions to this behavior.

Findings should be interpreted cautiously, given the non-representative population; however, our results have broad implications for increasing bicycling in auto-dependent communities. Scofflaw cycling behavior is certainly rampant in the United States, but so is scofflaw driving, and scofflaw walking. Planners and advocates have suggested that this is the case in the US, but this research is the first of its kind to specify the type, extent, and motivation behind scofflaw behavior.

References

passenger mile from transit systems and personal vehicles will offer important reference points for desirable urban population densities in light of climate change.

For an empirical analysis, we will use the National Transit Database (NTD) which compiles the most extensive data on the public transit systems in U.S. cities: capital and operating funding, operating expenses, transit service supplied by mode, and transit use by mode. We will estimate UA level emission factors per passenger mile, using annual energy consumption of transit agencies by source and mode, total passenger miles, and CO2 emission factors by energy source. We will conduct multivariate analyses to establish a linear or non-linear relationship between UA density and carbon-efficiency of the transit system given the current energy and technology portfolio, while controlling for other complicating factors.

References


Abstract Index #: 754
TRANSPORTATION IN AN AGING SOCIETY: AN ANALYSIS OF OLDER PEDESTRIAN CRASHES
Abstract System ID#: 700
Pre-organized Session: Traffic Safety Planning

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Mobility is one of the most significant factors associated with successful aging. With an increasing aging population, there is a growing need to understand travel behavior and transportation alternatives of older adults. Personal automobile has been the predominant mode of travel among older adults. However, cognitive and/or physical deteriorations eventually lead older adults to cease driving. It has been reported that walking is well perceived among older adults as a travel mode as well as a physical activity that leads to a healthy life. How to create more walkable environments that facilitate successful aging and healthy lifestyle have garnered attention within planning and public health research and practice.

While walking is a desirable activity and a travel mode that benefits older adults, it should be noted that older pedestrians are vulnerable road users. In 2010, 13.1 percent of the total U.S. resident population (40.4 million people) were age 65 and older. However, they made up 19.3 percent of all pedestrian fatalities in the same year. The pedestrian fatality rate of older adults age 65-74 per 100,000 persons was 1.98 and that of those age 75 and older was 2.78 while the rate of all ages combined was 1.64 in 2010.

This study will examine pedestrian crash characteristics of older adults age 65 and over using the General Estimates System (GES) data. GES data come from a nationally representative sample of police reported motor vehicle crashes of all types and injury levels in the United States. Pedestrian crashes occurred between 2009 and 2013 from the data will be analyzed for this study. Personal (both driver and pedestrian), temporal, environmental, spatial characteristics associated with older pedestrian crashes will be investigated with a comparison to younger adult pedestrians age 20-59. The random coefficient binary logit model will be employed to conduct a robust analysis to examine unique characteristics of older pedestrian crashes in comparison with younger adult pedestrian crashes.
The findings of this study will contribute to better understanding of older pedestrian crashes and what can be done to improve their safety. More specifically, the findings will reveal specific behavior and/or circumstances that drivers and older pedestrians need to pay attention to avoid crashes and what roadway environments and safety strategies need to be developed in the face of increasing number and proportion of older adults in society.

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Abstract Index #: 755

OVERCOMING INADEQUATE FEDERAL TRANSPORTATION FUNDING: COMPARING MULTI-JURISDICTIONAL REFERENDUMS ACROSS METRO AREAS

Abstract System ID#: 723
Individual Paper

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Funding decisions, and the process through which they are made, often serve as de facto planning, as decisions are made which govern billions of dollars of infrastructure, and last decades into the future. This process can become quite complicated when building large regional infrastructure projects that connect many jurisdictions, and require the cooperation of numerous local governments. This challenge is exacerbated by an inadequate and decreasing federal commitment to regional transportation (Baldwin & Lombardi 2005).

Many local governments have responded by asking citizens to vote on whether to fund their own transportation, a method known as local option taxation or self-help funding. While these are an expedient solution, they make it difficult to coordinate infrastructure across local jurisdictions due to uneven levels of funding from one jurisdiction to another, and disjointed decisions across jurisdictional lines (Goldman 2007). For example, without a regional funding source, a rail line from one city to another might easily stop at the county line. Indeed, the literature on the role local option taxes play in regional transportation planning suggests insufficient cross-jurisdictional coordination in the process for choosing projects to fund using local option tax measures (Goldman 2003). Some regions have sought to overcome this issue by moving the “local” process to the regional scale, and holding a referendum across several local jurisdictions at once. This has allowed them to propose more comprehensive solutions in an integrated and multi-jurisdictional infrastructure program. State authorizing legislation plays a major part in limiting the use of multi-jurisdictional transportation funding processes (Frug 2002), and this study seeks to better understand the role state legislation has played in shaping multi-jurisdictional tax processes across several US metro regions.

This study builds on past work looking at the Bay Area, and compares those findings to research conducted in several other US regions. It examines how multi-jurisdictional infrastructure funding processes have occurred in several US regions. For each case it employs interviews and archival documents to understand the extent to which the process was shaped by internal factors, such as its participants and local politics, versus features of the
state legislation that indicate the level of local autonomy granted by the state. This inquiry is especially concerned with the mechanics through which projects were selected, and how this autonomy affected the decision making process. This research will provide evidence of what made each process work, what did not, and how such processes can be done better in the future. In a political environment shaped by increasing devolution of power from the federal government to local and state levels of government, it is essential for academics and policy makers to understand the methods being used to bridge localist tendencies and develop regional infrastructure. The multi-jurisdictional referendum strategy remains understudied, but holds enormous promise to provide comprehensive regional solutions despite a trend towards devolution of decisions to lower levels of government.

References


Abstract Index #: 756

IMMIGRANT TRAVEL BEHAVIOR IN THE SAN FRANCISCO BAY AREA: FINDINGS FROM AN INTERCEPT SURVEY

Abstract System ID#: 732
Individual Paper

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Although immigration has slowed during the recent economic downturn, immigrants and their descendants still make up a growing proportion of the US population. Low-income immigrants are particularly reliant on transit, walking, and bicycling for their daily travel, much more so than other population groups. Improving their access to regional economic opportunities and retaining their low reliance on polluting and congesting personal vehicles requires reducing barriers to alternative transportation such as distance, safety, inconvenience and cost. Scholarly literature has tended to find that the built environment, transportation service provision, cost, and resource sharing are the primary factors in transportation choice (see for example Chatman 2014; Chatman and Klein 2011; Agrawal et al. 2011; Blumenberg and Smart 2010). “Soft” measures, such as perceptions of those objectively measured factors as well as attitudes toward safety and convenience of different modes, have not been explored in much detail in low-income or immigrant populations, or via last-mile walking and bicycling connections to public transit. Our study fills this gap in scholarship.

In this paper, we present results from the second phase of our study on immigrant travel in the San Francisco Bay Area, with a intercept survey in the field that has collected about 1,200 responses so far from major transit stops, commercial districts, and other locations in predominantly low-income immigrant neighborhoods. The survey collects habitual travel mode, perceptions of and attitudes toward the neighborhood environment and transportation barriers, and demographic characteristics. We will report findings from data description, statistical tests of comparison between immigrant and non-immigrant respondents, and neighborhood-by-neighborhood spatial variation in perceptions and attitudes among respondents of different nativities, incomes and modal patterns.

The results form part of a larger study that includes recent work in which we conducted interviews of low-income Latino immigrants and staff of nonprofit organizations, qualitatively describing what respondents identified as barriers and challenges in their daily travel (Barajas, Chatman, and Agrawal 2014). Our results will help
transportation planners understand how perceptions among different population groups may influence travel in distinct ways. They will also inform further study of immigrant travel in planning practice by identifying information relevant to immigrants' needs that transportation agencies do not typically collect in travel surveys or via secondary data sources.

References


Abstract Index #: 757
REMEMBRANCE OF CARS AND BUSES PAST: HOW PRIOR LIFE EXPERIENCES INFLUENCE TRAVEL CHOICES
Abstract System ID#: 740
Individual Paper

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This study uses data from the Panel Study of Income Dynamics (PSID) to examine how prior residential locations and travel experiences influence later travel choices. This panel data set, the longest-lived of its kind, contains information on families, individuals within those families, their residential locations, and a host of other variables, including their expenditures on automobiles and public transportation. The PSID includes approximately 22,000 individuals living in 9,000 families. We examine how one’s residential location history (from 1968 to 2013) influences the decisions to own and operate a car on the one hand, and use public transportation on the other.

We explore whether those who have previously lived in auto-oriented environments continue to use automobiles when they move to transit-rich places, and we test whether they use cars at greater rates than their neighbors who do not have a history of living in an auto-dominated environment. We also explore the opposite trend: whether those who previously lived in transit-rich places “carry with them” a habit of riding transit, even when they move to transit-poor environments. For both these phenomena, we examine the durability of these habits over time.

We find that prior residential location and travel experiences do inform current travel choices. Descriptive statistics suggest that families who move from transit-rich areas to transit-poor areas own fewer cars and use more public transportation than their new neighbors who have not moved from a transit-rich area. We also estimate time-series regression models of transit expenditures and car ownership to control for the possibility that factors associated with moving (for instance, age, changes in employment status, and others) may explain our findings. Initial findings suggest that prior travel environments continue to exert an influence on current travel patterns, though characteristics of the current travel environment are more important.
References


Abstract Index #: 758
TRANSIT-ORIENTED DEVELOPMENT FOR AGING ADULTS: AN EVALUATION OF RECENT TRENDS
Abstract System ID#: 743
Individual Paper

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Fulfilling daily needs associated with successful aging portends many challenges. In particular, as their driving skills deteriorate, many aging adults will need to find alternative means of travel that will allow them to conduct basic out-of-home activities. One approach to addressing this problem is to create places that allow one to effectively reach a variety of activities without a car. A transit-oriented development (TOD) ostensibly provides this type of place. TOD is commonly defined as compact, walkable development immediately surrounding a major transit station.

In this project our key objective is to provide a nationwide examination of TOD from the perspective of how well it attracts aging adults. This will involve collecting data about the demographic characteristics (particularly age profiles) of the areas surrounding a large selection of major transit stations across the US. The geographic locations of more than 4,000 transit stations are available from the Center for Transit Oriented Development (2014), which will form the set of stations we will analyze. This task will involve GIS overlays of census data from 2010 and 2000. This task will also involve the classification of station areas to determine which ones meet basic criteria for TOD in terms compactness and walkability. Ultimately, the change in older populations (both in raw numbers and percentages) around these transit stations will be compared to surrounding areas to determine how much (if at all) TODs have been attracting older groups. Further, specific stations that have performed particular well and poorly will be identified and studied in more detail to identify specific elements of TODs that seem to attract or repel older adults.

References

Automated Vehicles (AV) will likely have far-reaching implications for the design and use of the transportation system. Studies examining the potential impacts of AV have identified numerous factors that could impact travel behavior, roadway capacity, and traffic congestion including reduced travel costs, improved roadway capacity and efficiency, reduced vehicle crashes, and improved mobility for non-drivers (Eno, 2013; Bierstedt et al., 2014; Anderson, et al., 2014). However, the potentially offsetting effects of these factors have created uncertainty as to the ultimate impact of AV on travel behavior (Litman, 2015; Anderson, et al., 2014). Consequently, to be able to effectively plan for the emergence of AV, it is necessary to develop a better understanding of how AV will impact individuals’ travel decisions and behavior. Of particular interest to advocates of alternative forms of transportation is the impact AV will have on individuals’ mode choice. Will AV cement the place of the automobile as the dominant form of transportation by drawing people away from other modes and enabling those previously unable to drive to travel by automobile or will the emergence of automated taxi-services and shared auto-ownership heighten the ability of public transit to serve larger portions of the population? While predicting future mode-shares may be uncertain at best, insight into the impact AV will have on mode-choice decisions can gained by examining the characteristics of those more likely to adopt AV.

To this end, this study will analyze survey data examining the public’s perceptions of and willingness to adopt AV to determine how individuals’ current travel behavior impacts their willingness to adopt and use AV. More specifically, it will address how one’s current mode choice, quantity of travel, and ability to drive (as measured by possession of a drivers license and car ownership) affects an individual’s eagerness to adopt AV. By examining each of these questions, this study hopes to provide insight into the impact the emergence of AV will likely have on the public’s future travel behavior and mode-share.

This research will use data from a survey currently being conducted by a team of researchers at Florida State University. This survey specifically asks respondents how likely they are to adopt AV technology (very likely, somewhat likely, somewhat unlikely, very unlikely). The responses to this question will be used as the dependent variable in an ordinal model. Current travel behavior characteristics (as described above) will be used as the primary explanatory variables, along with a set of demographic controls.

References

disconnected from entry-level jobs both by distance and by inadequate transportation systems. Limited municipal investment in transportation options exacerbates household underemployment and degrades quality of life, while continuing poverty erodes the ability of local government to make adequate investment in transportation options.

Research from the Brookings Institution and others suggests that “improved transportation services can enhance economic outcomes, with the most compelling evidence centered on access to automobiles...” (Blumenberg & Waller, 2003). Current census data show that even among households that do not own a vehicle, 20 percent drive alone to work—meaning they find a private car to borrow—and another 12 percent commute via carpool (Tomer & Kane, 2014). The most robust research on mobility and poverty was conducted by the Urban Institute for Driving to Opportunity (2014). Findings indicate important differences between housing voucher recipients who had access to automobiles and those who were transit dependent.

This research will be based on storytelling and narrative from residents of a low income neighborhood in Memphis. Participants will share their daily travel routines through survey responses, face-to-face interviews, and daily journals. This will help us identify transportation challenges and reveal what alternative informal “organic” approaches to getting around are in use. Documentary-style videos will communicate residents’ stories.

Specific questions might include the following.

- Do residents take the bus to work? What happens when they do? Does it get them there efficiently? Do they feel secure?
- What about residents who own a car? Are reliability issues and maintenance expenses an issue? What about the cost of gas and insurance?
- Can residents bike or walk to where they need to be?
- What are the informal alternatives? A neighbor with a car? A car shared by multiple family members? Etc. What policy solutions can be implemented to support these approaches?

The participation of residents will serve the following research questions:

1. Are there innovative alternatives to the current approach to transportation that would be more effective/efficient at improving mobility in low income neighborhoods? (And is Memphis “too far gone” for an approach that focuses solely on the bus as transit for the poor?)
2. What can we learn from residents about the informal, “organic” approaches to getting around that they already use?
3. What is the role of narrative in community development and can narrative (storytelling) effect policymaking in ways that data alone cannot?

The interdisciplinary collaboration between planning and film students, will allow for community residents to share their concerns and give them voice through powerful storytelling mechanisms – in a way that makes them more than mere data points. Participating households would share their daily travel routines through survey responses, face-to-face interviews, and daily journals. This would help us identify transportation challenges and reveal what alternative informal “organic” approaches to getting around are in use. Short documentary films would depict “a day in the life” of residents facing a variety of challenges that affect their quality of life.

There is ample data that describes the inadequacies of the local transit system and the connection between transit and poverty. (In Memphis, workers who rely on public transit earn half as much as those who drive to work.) But perhaps numbers are not enough. There is a vast literature on the role of storytelling in city planning. This research will serve as a case study to help understand how storytelling can influence policy.

In addition, a data based approach to policy tends to lead to a one-size fits all set of solutions and misses important nuances.
Transit-Oriented Development (TOD) has recently become a target amongst some housing affordability activists in response to the high cost of housing. However, much of this activism has been visceral, based on the sticker shock of rental and for-sale prices of new construction in a market with pent-up demand for living in TODs. This study uncovers a paradox that while TODs are significantly more expensive places to buy and rent compared to the average home, nationally, housing affordability in TODs is more attainable than non-TOD station locations. Moreover, when accounting for the combined cost of housing and transportation, TODs are more affordable than non-TOD station areas. The study establishes a typology of station areas along a TOD–Transit-Adjacent Development (TAD) spectrum. Data from the US Census, the National TOD Database, the EPA Smart Location Database, Walk Score and Zillow Real Estate Research are combined into a national, geocoded database of 4,400 station areas. Walk Score and housing density are used to establish a typology of station areas into categories of TODs, TADs and Hybrids. The study also compares the built environment, vehicle ownership, commute mode, transit service frequency, housing tenure, socioeconomic composition and access to jobs in TODs, TADs and Hybrid station areas.

References
DOES ZONING MATTER? THE IMPACTS OF LIGHT RAIL TRANSIT ON PROPERTY VALUES: COMPARING HOUSTON AND DALLAS
Abstract System ID#: 761
Individual Paper

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There is a plausible and intuitive assumption that a “zoning city” and a “non-zoning city” develop noticeable differences in terms of urban form, transportation systems performance, and the impacts of transportation infrastructures on housing markets. However, there were few studies that involve rigorous tests of these assumptions using sound empirical evidence. This study addresses these gaps by comparing Houston and Dallas, the former the largest U.S. non-zoning city, and the latter, a zoning city of comparable size and regional situation. This study compares data on the transportation performance of these two cities, including mode shares, travel time, and travel distance, etc. It also uses recent housing appraisal data to examine the effects of Houston’s METRORail line and Dallas’s DART rail line on residential property values. It adopts a conventional ordinary linear regression (OLS) test to investigate the contribution of a set of variables representing the physical, neighborhood, and accessibility characteristics of properties. The results for the impacts of rail transit systems on both residential and commercial property values in Houston and Dallas are compared.

References
system to evaluate emotions. The headset provides real time, quantitative data for 5 kinds of emotions in high time resolution.

There have been a few studies applying the technique in the city environment perception and transportation field. This paper highlights a missing feature in the literature: a discussion of the experiment design process. We describe the features of the EEG based emotion detection technique, and then present a framework for general experiment design. We list 7 components that should be considered during experiment design and discuss alternatives for each of them. The components are environment setting, emotion calibration method, emotion elicitation method, variable setting, recording method, sampling method, and data processing method.

Based on such framework, we carried out a pilot experiment measuring the emotion change in the bus waiting experience. The experiment illustrates one specification of the experiment design possibilities. The bus waiting experience is simulated through watching video clips, which are shot at a bus stop. There is a warm-up period that allows the headset to do emotions calibration as well as allows the subject to get used to wearing the headset. To help the subjects elicit the emotions that usually come up when waiting for a bus, we designed a reward-penalty scheme according to the length of waiting time. The variables that the pilot experiment investigates are length of waiting time and bus schedule information. The recording method, sampling method and data processing method are detailed in the paper.

By analyzing the data from the experiment, we interpret the emotion changes according to events and the subject’s personality. The results show that emotion changes often occur as certain events approach. The event may be a reward-penalty time threshold, or seeing a bus coming in the video. The emotion data generated by the headset agree with the subject’s self-reported personality pretty well. The emotion curves are less fluctuant for more patient and calm people.

Though the EEG based emotion detection technique is still at the emerging stage, this study along with other researches suggest that the current technique is mature enough and has promising potential of bringing new insights of emotion study into the city and transportation planning field. The pilot experiment focuses on the emotion change during waiting for a bus, but the research possibility brought by the technique is much broader than this topic. The emotion feedback is basically a response, and the question could lie in city form design, public transportation service, urban policy and so forth.

References

Abstract Index #: 764
ASSESSMENT OF FLORIDA RESIDENTS ATTITUDES TOWARD AUTONOMOUS VEHICLES
Abstract System ID#: 776
Individual Paper

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Autonomous Vehicles (AV) are a quickly emerging technology that could radically alter the nature of transportation in ways no technology has done since the invention of the car. Even though AV promises to significantly improve the safety and efficiency of the transportation system, the technology’s dependence on passengers’ willingness to trust a computer to safely navigate any driving situation will make the public’s attitudes toward AV one of the most important issues in the future use and success of AV. In particular, the question of whether consumers will be willing to relinquish full control of the vehicle will be a major determining factor of whether and how quickly AV are adopted. In addition, public opinions concerning issues surrounding AV’s incorporation into the transportation system, including whether AV should have dedicated lanes and whether AV should be a private or public form of transportation, can help to inform policymakers on how to best guide and regulate the smooth integration of AV technology. However, AV are being developed so quickly that very little is known about the public’s attitudes toward and willingness to adopt AV. In this way, developing a better understanding of the public’s attitudes toward and willingness to adopt AV is vital to the smooth and successful incorporation of AV into the transportation system.

Existing literature on public opinion of AV suggests that the majority of Americans are interested in AV, but are not yet ready to fully embrace the technology (JD Power and Associates, 2014; Schoettle & Sivak, 2014; KPMG, 2013; Howard & Dai, 2013). This study expands on this literature by further examining the causes of the public’s distrust of AV, determining how the public’s perception is moderated by demographic characteristics and comfort with technology, and uncovering how likely the public will be to adopt AV in the future.

To this end, a team of researchers at FSU have conducted a survey of Florida residents to gauge their knowledge of, interest in, and willingness to adopt both fully and semi-autonomous vehicles. The survey assesses whether residents trust autonomous vehicles enough to adopt them and identifies issues policymakers may need to address before AV can be adopted on a large scale. To do this, the survey investigates the public’s perception of the benefits (e.g. improved safety and efficiency) and risks (e.g. privacy and liability) related to the use of AV. Respondents are also asked their preferences assuming different stages and forms of AV including privately owned autonomous vehicles, shared-ownership vehicles, taxi-like AV services, and transit systems that rely on AV technology, as well as questions on willingness to pay for autonomous technology. Finally, the survey assesses how participants’ demographic characteristics, travel behavior, and comfort with technology impact attitudes toward AV. Given AV’s unique potential to enhance the mobility of aging and transportation disadvantaged populations, and the State of Florida’s large elderly population which will grow to over 5 million in the next decade, the survey gives special attention to the attitudes and concerns of Florida’s older residents (aged 65 and up).

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Abstract Index #: 765
ASSESSING PARATRANSPORT SERVICES IN HARRIS COUNTY, TEXAS
Abstract System ID#: 782
Roundtable or Informal Discussion Session
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MetroLift is a complementary paratransit service offered by the Metropolitan Transit Authority in Harris County and surrounding areas. Many studies have shown that the senior and disabled population is expected to increase in Harris County, which will increase the demand for ParaTransit Service. However, Metrolift is facing a funding challenge, which means it has to use its resources wisely. This analysis is designed to help Metrolift optimize its services by better understanding its customers and their trip behaviors within the Harris County using simple GIS tools. The analysis is mainly divided into three parts. The first part deals with exploring where the Metrolift users reside and trying to understand the association of socioeconomic characteristic with the demand of the services using Patron Data from December 2013. The second part of the analysis helps to understand the temporal trip patterns like when, why and how many trips are being made, using Trip Data from October 2013. Finally the third part is designed to visualize the location and concentration of these trips. The results from these analyses show that the number of Disable Persons in a block group, Household Income, Race, and Vehicle Availability are significant variables in determining the demand for MetroLift. Additionally, the maximum numbers of trips are for residential purpose followed by shopping and work related trips. Metrolift can use the analysis as a way to classify essential and discretionary trips, in the event there comes a time, when there is a need to “ration” trips using Metrolift, due to expanding demand by a greater number of eligible riders in the Houston Metro area. Thus these analyses provided some valuable insights in understanding trip patterns and behaviors of Metrolift users in Harris County which can in turn be crucial in managing and improving the Metrolift services.

Abstract Index #: 766
HOW DO SOCIO-DEMOGRAPHICS AND BUILT ENVIRONMENT AFFECT INDIVIDUAL ACCESSIBILITY BASED ON ACTIVITY SPACE? EVIDENCE FROM GREATER CLEVELAND, OHIO
Abstract System ID#: 790
Individual Paper

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Transportation planners traditionally use mobility to evaluate transportation policies and projects. However, mobility-based planning generally favors private vehicles over public transit and non-motorized modes (Handy 2002). Making driving around easier is the major goal of mobility-based planning. It tends to encourage more people to drive while ignoring the needs of non-drivers. As a result of this trend, congestion, air pollution and social equity deteriorate in the urban environment (Handy 2005). This trend is conflicted with some sustainability goals such as enhancing environmental viability and social equity. In recent years, transportation plans and studies have shown a growing interest in accessibility-based planning that focuses on the needs of travelers instead of the transport system (Handy 2005; Lucas 2012). Accessibility is defined as the ease of an individual or groups of people to participate in activities through using one or multiple modes under certain constraints (Geurs and van Wee 2004). Currently, accessibility studies commonly rely on using a uniform travel time or distance as impedance for each zone. However, this uniform impedance cannot capture the heterogeneity in individual travel behavior within each zone. As compared to travel time or distance, activity space is a relatively comprehensive impedance. It considers the traveler’s characteristics, the spatial distribution of the locations this traveler has been to, and the routes and areas travelled through (Schönfelder and Axhausen 2003). In this study, individual accessibility is measured and analyzed to reflect the capability of reaching resources available within individual activity space. This approach is adopted to describe how the levels of accessibility vary across different income groups. If the difference exists, we also explore how potential factors influence accessibility at the individual level.

Using the 2012 Northeast Ohio Regional Travel Survey, individual daily activity space is calculated through a Traffic Analysis Zone (TAZ) area based approach. The identified activity space is then used to calculate individual accessibility to different opportunities (land-use types at the parcel level). Based on statistical comparisons, we find that low-income people have lower accessibility to most urban opportunities (except commercial and industrial parcels) as compared to other income groups. To identify the potential factors leading to these differences, Negative Binomial Regression models are used. These models examine the effects of socio-
demographics, transit proximity and built environment on individual accessibility. To reduce the ambiguous effects on travel behavior from individual land-use variables, the K-means cluster approach is applied to characterize the built environment into 7 new neighborhood types. The preliminary results indicate that living in more urbanized neighborhoods increases individual accessibility, after controlling for socio-demographical features and transit proximity.

This study adds to existing accessibility literature through using activity space to identify and explore accessibility at the individual level. This approach accounts for both individuals’ socio-economic characteristics and living environment. Therefore, it provides better understanding of social effects of transportation policies at disaggregated level, as opposed to the traditional zonal accessibility.

References


Abstract Index #: 767
PEAK CAR? ANALYZING CHANGES IN CAR OWNERSHIP WITH PANEL DATA FROM 1999-2013
Abstract System ID#: 795
Individual Paper

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Since the mid-2000s, car use and ownership has been declining in the US and peer countries. But who exactly is giving up their cars and why? One explanation posits that changing preferences for urban living and transit use along with an increasing environmental consciousness, could be leading to a decline in auto ownership, particularly among the young. An alternative explanation suggests that economic factors are the cause of declining automobile consumption. For planners, the different explanations point to different policies to balance welfare and environmental sustainability.

We use the Panel Study of Income Dynamics (PSID) to examine changes in auto ownership within US families over time. As a panel data set, the PSID is particularly well suited to analyze changes over time. We include eight waves of the panel survey, from 1999 through 2013. This large national survey includes approximately 22,000 individuals living in 9,000 families.

First, we describe the changing nature of car ownership among various demographic groups, focusing on young adults, older adults, racial and ethnic minorities, urbanites, low-income families, and others. We examine these groups in conjunction with other defining characteristics of the family, including the presence of children, residential mobility, and others. We then use a time-series regression to model changes in the ratio of cars to adults within families across successive waves of the PSID. We examine the influence of factors such as age, household size and structure, employment status, income, the availability of high-quality public transportation, changing gasoline prices, and others.

We find that today’s young adults own fewer cars than previous generations did when they were young. But focusing on young adults only tells part of the story; declining car ownership among young adults is offset by
older adults who own more cars than those who came before them. We also find that economic and demographic factors explain much of the declining levels of auto ownership, particularly among young adults. This suggests that planners should temper their enthusiasm about “peak car,” as this may largely be a manifestation of economic factors that may reverse in coming years. Other factors, such as delayed marriage, may continue into the future.

References


Abstract Index #: 768
PUBLIC TRANSIT, AGGLOMERATION ECONOMIES, AND FIRM BIRTHS: EMPIRICAL EVIDENCE FROM NEW JERSEY
Abstract System ID#: 798
Individual Paper

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New establishments play an important role in urban land use structure and regional economic development (Shukla and Waddell, 1991; Acs, 2006). Therefore, it is critical to understand what factors determine where new firms will form. Yet, little is known about determinants of firm formation, especially at the micro level. One major objective of developing transport infrastructure is to stimulate economic development; concentrating businesses and jobs within the station area may be one strategy. If improvements in transport infrastructure can influence firm formation, it is possible that transportation policy can become a useful tool to promote economic growth. However, the relationship between public transit systems and new firm patterns remains largely unclear. What are the determinants of firm formation? Do new transit services affect firm birth and how does this differ across sectors? What implications does firm formation have for contemporary urban land use structure and urban form? How do local contexts (eg: local development plans) contribute to the process of firm birth? With the assumption that transport infrastructure is a key determinant of new firm birth, this paper investigates the impacts of changes in the accessibility of a new light rail line on the location patterns of new firms in Hudson County, New Jersey.

Negative binomial models are estimated to evaluate the associations of new firms in different sectors with proximity to transit stations. Data is derived using the geographic information systems (GIS) and the National Establishment Time-Series database. This gives detailed spatial and firm-level factors that are integrated to construct econometric models. By mapping predicted probabilities for each industry and comparing these with observed densities, this study also identifies the extent to which locational preference translates into aggregate land use, revealing how transportation infrastructure influences firm location choices, urban land use patterns and structure. How local policies might impact firm formation is also included in the estimates to provide more specific, contextual understanding of determinants of firm formation.

References

“Livability” has become a popular term among planners in the United States. Interest in the concept emerged in the 1970s and it was formalized on June 16, 2009 when the Secretaries of HUD, USDOT and EPA introduced the six livability principles of the Sustainable Communities Partnership. Yet in spite of frequent discussions in planning and design circles lauding its importance, there has never been clear consensus on what livability actually means, let alone how to measure it and how to achieve it.

Drawing on insights from a federally funded livability research project focusing on transit corridors (and the constituent stations), TCRP H-45: Measures, Methods and Strategies for Transit Corridor Livability, this paper presents and discusses the methods, metrics and data sources that were used to empirically verify a transit corridor livability typology using data from over 300 existing transit corridors from around the U.S. Then, through an iterative mixed method approach, combining both quantitative statistical analyses with qualitative case studies and interviews with professionals, this paper evaluates which of these methods, metrics and data might serve as recommended tools and practices to optimize transit corridor livability. In doing so, the paper: a) identifies the people and place characteristics (factors) of each of the Livability Principles of the HUD/EPA/USDOT Sustainable Communities Partnership based on the concepts found in the livability literature; b) develops a typology of transit corridors to help identifying and classify common physical and functional characteristics of a place that are compatible livability-supporting planning and policy outcomes; and finally c) this paper identifies the planning and investment strategies that are best suited to improving livability in different corridor contexts, and which are being drafted as part of a project Handbook on strategies useful toward creating more livable transit corridors.

This paper also presents a typology of corridor types, which is useful in helping analysts and decision makers identify and measure how people and place characteristics interact to improve access to livability opportunities along transit corridor. The following broad corridor types are discussed in this paper:

- **Emerging Corridors**, which serve low-intensity, use-segregated communities with limited transit service. Lower livability performance results from infrequent transit service, relatively few transit- and pedestrian-accessible destinations, and auto-orientation in transportation and land use patterns.
- **Transitioning Corridors**, which possess many livability components but lack the key components needed for a high state of livability. They include Emerging Corridors that have been transformed by development of new major transit-accessible destinations (activity centers) in at least one location along the corridor. Transitioning Corridors also include urban revitalization and redevelopment opportunities, either due to much underutilized land from urban decline and disinvestment, or older, economically depressed transit-oriented neighborhoods.
- **High-Functioning Corridors**, which represent the highest levels of corridor performance. They contain high-capacity and local transit service, provide dense and diverse destinations, offer reasonably direct pedestrian routes along enhanced walking environments, and feature balanced jobs and housing.

These categories provide a framework that can help Handbook users to identify the Strategic Goals and planning strategies best suited for the existing conditions and desired outcomes for their corridors.

**References**

WOULD CONGESTION PRICING HARM THE POOR? DO FREE ROADS HELP THE POOR?

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Regressive congestion charges could make urban highways more efficient, but observers often worry that such charges would disproportionately burden low-income drivers. We use data from the American Community Survey, the Integrated Public Use Microdata Sample, and the National Household Travel Survey to investigate the potential equity impacts of congestion charging. We show that in the USA’s ten most congested urbanized areas, poor drivers are both small minority of peak hour travel and a minority of the poor. We also show free urban highways are overwhelmingly a subsidy to the affluent. Lastly, we show that residential areas near freeways, which bear the brunt of vehicular air pollution arising from congestion, are disproportionately poor and minority, and often populated by households without vehicles. We conclude that pricing urban freeways may visit smaller costs on the poor than previously imagined, and may deliver substantial health benefits as well.

References

INTEGRATED PLANNING OR DIVIDE AND CONQUER?: ASSESSING THE VIEWS OF TRANSPORT AND ECONOMIC DEVELOPMENT PLANNERS IMPLEMENTING MODERN STREETCAR PROJECTS IN U.S. CITIES

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Modern streetcars are an emerging popular public investment in US cities. Over the past 15 years, six systems have opened, with four more scheduled to start service in 2015 and 12 projects currently in the planning stages. Streetcar projects are politically controversial, partially due to their claims about the ability of streetcars to spur economic development in urban areas and partially due to concerns about their higher costs compared to other transport modes, like Bus Rapid Transit. Transport scholarship tends to deride streetcars as bad transportation services while urban development literature (which addresses this much less directly) provides criticism about the ability of a single investment to foster real economic growth, particularly in areas experiencing decades of disinvestment.
Despite the strong policy debates and positions surrounding modern streetcars in U.S. cities, we know nothing about the perspectives of planners and public sector staff implementing streetcar projects. Modern streetcars are complex amalgams of public goals and policies related to urban transport and economic development. The ability of a streetcar project to deliver on its promises – both regarding economic development and transportation benefits and project time lines and budgets - are largely contingent on the ability of local actors to work cooperatively across government sectors that have traditionally been isolated from one another. Project impacts and financial burdens can vary substantially across projects and may be the result of decisions made about implementation or made during the implementation process by local planners and public sector staff.

Using semi-structured interviews from planners and policymakers in Kansas City, MO, this paper documents the perspectives of local project implementers while also documenting the key challenges faced during the implementation process. Do local planners and policy officials categorize the streetcar project as an economic development or a transportation project? Do perspectives vary with the respondent’s job assignment or role in the project? According to local implementers, who “owns” this project? How do departmental oversight and work responsibilities align with how the project is perceived – i.e. who are the lead agencies; how do economic development and transport agencies work together in project implementation? Is the Kansas City project categorized by a collaborative, comprehensive planning approach or do bureaucratic arrangements hinder collaboration, as the literature suggests they may?

Preliminary interviews indicate that project implementers in Kansas City, MO view the streetcar as both a transport project and an economic development stimulus. If this view is pervasive among project staffers (a claim the interviews will test), how do implementers navigate conflicts in policy prescriptions provided by two different frameworks? How are demands for increased parking to serve retail districts balanced with the need to reduce parking to make streetcar more attractive to riders? How do demands for a larger residential population for both transport and economic development reasons react to developer’s decisions to build additional office or retail space?

How institutional factors influence modern streetcar implementation is unknown, but evidence from other systems suggests that attempts to coordinate land use and transportation policies face severe barriers. Such barriers may prevent local actors from working in the collaborative, complimentary manner that is necessary to integrating economic development and transportation policies. This paper is part of a larger dissertation that investigating the institutional issues involved with streetcar implementation with the goals of identifying the intended and unintended consequences of the particular financing and governance arrangements being used in U.S. cities. By increasing our understanding of how local actors perceive new streetcar investments and negotiate implementation conflicts, I hope to illustrate how holistic, integrated planning can be achieved in the future.

References

Abstract Index #: 772
TRANSIT INVESTMENT, NEIGHBORHOOD CHANGE, AND HOUSEHOLD TRAVEL VARIATION: LONGITUDINAL FINDINGS FROM MULTIPLE US CITIES
Abstract System ID#: 825
Individual Paper
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The growing concern on congestion and vehicle emissions has motivated persistent search for effective strategies to reduce driving and automobile dependency. Voluminous studies have investigated whether transit investment and building high-density and mixed-use neighborhoods can promote public transit use, biking, and walking and lower vehicle miles of travel (VMT) (e.g., Badoe and Miller, 2000; Ewing and Cervero, 2010; Boarnet, 2011). However, most of the empirical studies are cross-sectional in nature. This largely constrains researchers to address two important questions: whether the land use-travel connection varies over time and whether a shift in neighborhood’s built environment can lead to a change in travel behavior in a dynamic perspective? The answers to these questions are critical to understand the causality among transit development, land use policies, and travel consequences and to compare the effectiveness of various mobility strategies.

Longitudinal data and analysis can help avoid the deficiencies of cross-sectional studies. The major barrier to longitudinal land use-travel study is the difficulties of collecting multi-year individual travel information. Since substantial land use change often occurs over a sustained period of time, the time interval between any two household travel surveys need to be considerably long. There are mainly two categories of such longitudinal studies (Raudenbush, 1989). The first is a panel study, in which data is collected by the repeated survey of individuals across multiple years. This type of longitudinal data is rarely found in planning practice, due to the respondent’s concern with privacy and frequently residential mobility in large US cities. The second is a trend study, which often collects data from comparable neighborhoods over time but from different individuals inside these neighborhoods. In recent years, the data sets for trend studies have become available in many metropolitans, though recent literature still barely uses them to explore the longitudinal land use effect on travel.

This study attempts to fill the gap, developing a longitudinal multilevel model (LMM) to simultaneously estimate the changing roles of neighborhood land use characteristics and the effects of transit development and neighborhood change on travel variation. The study investigates the data of household travel surveys (HTS) in two occasions between 1990 and 2010 from 14 US metropolitans. Neighborhood land use characteristics are measured based on traffic analysis zones. The LMM selects individual’s daily VMT as the dependent variable and land use density, transit access, and street designs of the neighborhood where the individual resides in as neighborhood-level land use variables. Control variables include individual-level socio-demographical attributes, neighborhood-level social factors, and metropolitan-level characteristics.

Our preliminary findings show that the short- and long- run effectiveness of transit investment and land use policies on VMT reduction may be very different. These results validate the importance of longitudinal data and analysis in land use-travel studies, suggesting that the short-run land use elasticity derived from cross-sectional analyses may be inappropriate for assessing the long-run effect of land use-based mobility strategies for reducing driving.

References
Various public transportation systems have been developed over the last two decades to provide people with better accessibility to their destinations. Among these transportation systems, bus rapid transit (BRT) systems have recently gained in popularity as an effective transit alternative that can be developed at a lower cost than other transit modes. Also, like other transit systems, most literature suggests bus rapid transit systems can improve connectivity within cities by making the street network less car-dependent, improving environmental quality, and enhancing economic growth while developing and operating at a relatively low cost.

Recent literature on public transit systems analyzes their impacts on economic growth and development at various spatial levels—from neighborhood to regional levels. Particularly, system type-specific return-on-investment has been one of the critical issues to support justifications of these transit systems (Cervero and Dai, 2014; Melo, Graham, and Noland, 2010). Generally, studies about the impact of public infrastructure on firm location suggest that public infrastructure investment influences firm location decisions because effective public infrastructure provides firms with better connectivity, reducing their fixed costs (Egger and Falkinger, 2006). Other studies argue that after introduction of rail transit, economic activities, including new firms, are concentrated along the transit corridor or station. This suggests that in the long term, better transit access can encourage firm agglomeration via firm relocation, and new firm formation along the transit corridors can play a major role in justifying transit investment (Chatman and Noland 2011, 2013). Although recent research about the impact of light rail systems on new firm formation finds that firms tend to cluster around the transit stations, there has been almost no research analyzing the impacts of bus rapid transit systems in terms of new firm formation along BRT corridors, which is a main goal of this study.

To address this gap, this paper analyzes firm-level data around the BRT corridor and stations by using InfoGroup Business data, which includes individual firm profiles throughout the U.S. Specifically, this study assesses the number of new firms and the change in employment over time in existing, relocated, and new firms. Secondly, this paper will seek to understand the change in the composition of employment by industry before and after the installment of BRT. For accurate analysis and generalization of the results, this paper focuses on three representative BRT case studies: the 3500 South MAX BRT in Salt Lake City, UT; the HealthLine in Cleveland, OH; and the Emerald Express (EmX) in Eugene, OR. This paper hypothesizes that there is a clear difference in new firm formation before and after the BRT routes open, and that the development and investment in BRT projects can revitalize areas around the BRT corridor by attracting new firms and by serving as a key driver for the growth of agglomeration economies in the city.

References
The “Complete Streets” perspective of transportation planning holds that all travelers should be accounted for regardless of mode (LaPlante and McCann, 2008). This is based on the idea that planning should not just consider automobiles, but alternatives such as transit, walking, and bicycling. However, as FHWA (2004) outlines, these are not the only alternatives that transportation planners are encountering. For example, skateboards, usually thought of as a recreational device, can and are being used for transportation.

Skateboard travel has become noticeable enough in some places that travel surveys have begun to count skateboarding as a unique mode choice. According to the California Household Travel Survey, skateboarders and users of similar non-motorized devices travel an estimated 48 million miles per year. Several universities in California have found skateboard mode shares in the low-to-mid single digits and rising shares over the last several years. Observations conducted by the City of Portland, Oregon found skateboard travelers present at 79 percent of intersections studied.

Given the presence of skateboard travelers, this paper focuses on two central questions: (1) What are the characteristics of skateboard travelers? Who are they? Why do they skateboard? (2) What are the ramifications for planning? Data comes from several sources including qualitative, in-depth interviews with skateboard commuters, observations of skateboarders, and review of available statistics on skateboarding, such as safety data.

This research has uncovered several interesting findings about skateboard travel. Skateboarding appears to be viable for trips up to a couple miles, with a catchment area larger than for walking. Skateboarding also appears to be amenable to multi-modal trips since skateboards can be easily carried onto transit vehicles or automobiles. Skateboards are used for “first-mile” or “last-mile” access on these multi-modal trips.

Skateboarding is also most popular among younger age groups. Thus, skateboarding could be a particularly interesting alternative mode for planners interested in youth travel and issues such as providing physical activity through travel and independent travel for non-driving kids and teenagers.

Skateboarders, while making an uncommon mode choice, can be characterized by the same thought process as other travelers, as articulated, for example, in the “Theory of Routine Mode Choice Decisions” (Schneider, 2013). Skateboarders do find skateboarding fun, however convenience is a top rated motivation. Skateboard travelers do face noticeable policy barriers, however, particularly rules targeted at restricting recreational skateboarding. As Nemeth (2006) outlines, recreational skateboarders are not well regarded by decision makers and communities frequently seek to exclude them from the public realm. Such prohibitions can prevent skateboarding from being a legal travel mode to many destinations.

References

Abstract Index #: 775
IMPROVING THE RELIABILITY OF TRAVEL SURVEY DATA FOR SUSTAINABLE TRANSPORTATION: DAY-TO-DAY TRAVEL VARIABILITY AND THE “OPTIMAL” SURVEY DURATION
Abstract System ID#: 843
Individual Paper
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Reliable travel data are essential to evaluating the environmental and health impact of smart growth strategies. While improved knowledge about the variability of transit, walking and biking travel across multiple days becomes increasingly necessary, the single-day travel survey (SDTS) still represents the archetypal duration of data collection among travel surveys conducted at the national, state or regional levels. The basic assumption in the conventional SDTS approach is that travel activities are repetitive from day to day, and if travel is reported for a randomly chosen day out of some longer time period, then an unbiased sample of behavior for that period can be obtained. Previous studies have challenged the SDTS approach, but the implication of survey duration on travel parameter estimates is still largely unknown; accordingly, there is little agreement on the “optimal” travel survey duration for accuracy of travel demand modeling. By analyzing a sample of seven-day travel logs from the City of Los Angeles, California (USA) during 2011-2012, we aim to contribute to the understanding of intrapersonal day-to-day travel variability (IDTV) and the implication of travel survey duration on parameter estimates.

Our final sample included 2,395 person-days from 352 individual respondents. Our analytical methods included linear regressions and Monte Carlo simulation experiments. Our linear models revealed that a number of factors significantly influenced IDTV, such as gender, age, income, and automobile ownership. However, the observed characteristics could only explain a very small portion of IDTV: 2% for the total trip count, 5% for the private vehicle trip count, 12% for the bus/train trip count, 4% for the walking/biking trip count, and 4% for the duration of walk/biking. There was a tremendous amount of residual IDTV that was hard to explain by observable characteristics; this may pose a risk to the validity of results from single-day surveys.

In order to better understand the risk and elucidate the influence of survey duration on travel parameter estimates, we also conducted Monte Carlo simulation experiments, which enabled us to contrast travel variables measured from the seven-day master sample with those from subsamples of a shorter period (one to six days). We found that it is possible for a less-than-seven-day period to generate parameter estimates close enough to the seven-day period; the “optimal” duration for a travel survey may be dependent on the specific travel variables measured and the desired accuracy levels. Regarding total trip counts and private vehicle trip counts, three days of survey duration may produce estimates that are very close to the estimates from the seven-day survey. Walking/biking trip counts may need at least five days of survey duration to produce estimates that are likely (about 90% chance) to approach those from the seven-day survey. Bus/train trips may be subject to the largest degree of uncertainty among all modes in terms of repetitiveness of travel; therefore, we recommend the seven-day duration for bus/train trips since estimates about bus/train trip frequencies from a less-than-seven-day survey duration may be associated with high risks of bias.

In conclusion, the conventional one-day approach is highly likely to produce biased parameter estimates due to the intrapersonal day-to-day travel variability. We recommend that transportation professionals and policymakers consider shifting from the conventional one-day approach towards the multi-day approach; surveys which focus on the modes of walking, biking and transit should consider data collection from a duration of at least seven days.

References

Parking pricing policies can apply to commuter, non-commuter and residential parking, and address a variety of financial, social, economic, and environmental objectives. In particular, parking pricing policies can generate revenue for operators, serve as tools to support commercial success and residential quality of life, and at the same time help manage travel demand, reduce congestion, travel time, and vehicular emissions (Shoup 2005; Greene and Schafer, 2003). Pricing is also one of the most effective measures in lowering transport carbon dioxide emissions (Cambridge Systematics, Inc., 2009; Barbour and Deakin, 2012). Using the University of California (UC), Berkeley as a study site, this study examines employee responses to alternative parking pricing strategies that account for location and provide incentives to reduce drive alone trips and the use of parking on campus. An original transportation and parking survey consisting of revealed and stated preference questions was designed for the purpose of this study, to evaluate the potential shifts in transportation mode share, trip frequency and parking behavior as parking pricing changes. Stated preference data have been widely used to study mode choice, to analyze the impact of transportation policies on travel demand using hypothetical scenarios and also for forecasting (Hensher, 1994), but fewer studies have applied this approach on parking pricing. The transportation and parking survey was sent to the entire UC Berkeley faculty and staff population of approximately 12,000 and received a 35 percent response rate with 4,188 respondents. Questions in the survey covered respondent’s personal and household characteristics, job characteristics, mode choice for a week, parking choices on the day they last commuted to campus, and reactions to a series of parking pricing scenarios. Alternative parking pricing strategies provided in the parking pricing scenarios included changes in daily parking rates, reduced or eliminated monthly discounts for daily parking and incentives for public transportation use. Each choice set contained four parking choices followed by 11 transportation modal alternatives for each day of the week. The parking choices included, 1) a conventional campus parking permit that offers unlimited parking at a monthly cost; 2) a restricted monthly campus parking permit that allows for parking three days a week or four days a week; 3) a daily campus parking permit, and 4) an hourly parking option at an off-campus location. The transportation model alternatives presented in the survey included drive alone using the chosen parking option; drive alone but park elsewhere; carpool or vanpool; motorcycle, moped, or scooter; bus; train; bike; walk only; other; work from home, and not on campus. Hence, data collected from the survey were used to construct a nested logit model, in order to connect parking and transportation mode choices and to evaluate the impact of parking pricing on mode choice. Nested logit models allow analyses of alternatives that are closely related by accounting for within-group correlation of errors and have a closed form probability function that includes a conditional probability and marginal probability. In this study, transportation mode choices are conditioned upon parking choices. The degree of potential change in mode choice depends on different demographic and socioeconomic factors, as well as current transportation demand and behavior. This study contributes to the parking pricing literature by evaluating its efficacy and employee interest in employer based incentives. Results from this study also provide insights on the interaction between parking pricing policies that are coupled with incentives for non-driving modes and the flexibility of work schedule. In addition, this study presents a detailed analysis of user groups who will be affected by changes in parking pricing policies, a consideration not previously examined in any detail in current literature.

References
Traditionally, planners, policymakers, and transportation scholars have agreed that transit investment has continuously and significantly changed the surrounding neighborhood. Although early studies about transit oriented development were focused on urban formations and land use pattern adjacent to transit stations, recent emerging concerns emphasize on equity issues such as gentrification and displacement that accompanied the transit system. Most cities that invested in transit systems have experienced considerable demographic, socio-economic changes in their neighborhoods (Bluestone and Billingham, 2010).

The Blue Line in the Los Angeles area was built twenty-three years ago on existing rail lines over twenty-two miles between downtown Los Angeles and Long Beach. With twenty-two stations, the line passes through the most neglected and disadvantaged communities in Los Angeles County and also through large segments of abandoned industrial lands. The Blue Line was supposed to promote economic development in the areas adjacent to the rail line. However, the communities in proximity still remain marginalized. Many researchers point out that the region’s disproportionate lack of economic development despite light rail transit is due to a lack of integrated approach that encompasses the need of core riders and private sector’s diverse interests (Loukaitou-Sideris and Banerjee, 2000). A number of abandoned lands along the Blue Line still wait for the reinvestment opportunity even now.

This report set out to evaluate and compare specific neighborhood changes along the Metro Blue Line in Los Angeles County in the viewpoint of their social equity impact. In order to better understand patterns of neighborhood change in proximity to the transit stations, comparison analysis was conducted based on socioeconomic and demographic changes in twenty-two areas designated Walksheds by the Metro Blue Line. The concept of Walksheds were used as the units of analysis, which was defined as the area within a half-mile walking distance from the transit station (Metropolitan Area Planning Council, 2014). The comparison analysis between Los Angeles County and neighborhoods in proximity to the Metro Blue Line stations used a series of social demographic indicators. Setting the start point at 1990, comparison analysis was employed to observe the pattern of change in the region by decennial data, followed by 2000 and 2010. While looking at change through time series data analysis vertically, the performance of each station area was examined horizontally. Therefore, comparative analysis was conducted in four stages to figure out the extent to which the neighborhoods have changed, how rapidly the change occurred and whether the neighborhood change occurred in a positive way or not.

According to the results, the Metro Blue line positively affected the neighborhoods in the vicinity of the rail line over time. At the same time, the result revealed that some of neighborhoods close to the rail line experienced displacement. Moreover, while some positive neighborhood change has occurred in the Walksheds, the area still
tended to be located in the City’s lower income areas, so making equity a key priority in future citywide TOD strategy. In fact, it could be seen as a failure to meet the goal of maximizing equity and fostering greater opportunities for upward economic mobility, since it accelerated unbalanced development between twenty-two station areas according to the result and most of neighborhoods along the rail line corridor still remains as the most marginalized neighborhoods in Los Angeles County.

References

Abstract Index #: 778
THE IMPACT OF URBAN FORM AND GASOLINE PRICES ON VEHICLE USAGE: EVIDENCE FROM THE 2009 NATIONAL HOUSEHOLD TRAVEL SURVEY
Abstract System ID#: 862
Individual Paper
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This paper relies on generalized structural equation modeling (SEM) to tease out the relationship between land use, gasoline prices and travel behavior. We analyze data from the Southern California subsample of the 2009 National Household Travel Survey (NHTS), which has a quasi-experimental nature thanks to large exogenous variations in gasoline prices during the administration of the NHTS (March 2008-April 2009). Our joint models of residential urban form, vehicle efficiency choice, and vehicle use account for residential self-selection and endogeneity of vehicle preferences in order to explain vehicle miles traveled (VMT) for both work and non-work trips. Residential urban form is treated as a latent construct that reflects observed variables such as population density, land use diversity and distance to employment centers. Our results suggest that in the short run, households drive 0.15% less for all trips and 0.18% less for non-work trips when gas prices increase by 1%, while work trips are not responsive to gasoline price changes. Moreover, the direct effect of residential urban form on driving is statistically significant for total and non-work VMT, but it has no impact on work trips. We also find that owners of more fuel efficient vehicles tend to be more educated, Asian and younger (under 30). Moreover, households in low density neighborhoods are more likely to have a higher income, to be older than 65 and either White or Asian; these households tend to own more vehicles per driver. Finally, our results show that accounting for the nature of trips is important for understanding the short term price elasticity of travel.

References
Neighborhood decline has become a critical problem in shrinking and deindustrializing cities. The issues of vacant property accumulation and abandonment have been amplified by concentrations of low income neighborhoods and underinvestment in transportation infrastructure in communities. Based on this problem, this paper examines the relationship between vacant properties and accessibility to components of sustainable transportation such as walkability and proximity to transit. If accessibility to sustainable transportation enhances benefits to land owners and renters, then it could help prevent urban decline in adjacent area.

To assess the relationship between land abandonment and sustainable transportation, this paper uses a logistic regression analysis. The dependent variable is abandoned lots, which is based on parcel level property tax information. Binary data is utilized to designate whether the land is vacant or occupied. In addition, to compare the differences between land uses, individual lots are categorized according to usage: residential and commercial. Thus, this paper contains two models with each dependent variables.

Walkability, proximity to the transit, and proximity to the major roads - freeway, arterial and collector roads - by each lots is calculated using Geographic Information System (GIS). Also, this research considers four more independent variables based on the literature review: 1) number of abandoned buildings in unit area; 2) property value; 3) total floor area; and 4) passed years after construction. The study boundary is set to the city of Dayton, Ohio, USA. Property tax data, land property maps, and infrastructure maps were gathered from the city of Dayton GIS and Montgomery County Real Estate databases.

According to the preliminary results, the proximity to major roads, number of abandoned buildings, and property value has significant influence on land abandonment for residential and commercial buildings.

References
- Galen Newman

Abstract Index #: 780
ARE PUBLIC STREETS BECOMING PRIVATE SPACES? IMPLICATIONS FOR TRANSPORT POLICY
Abstract System ID#: 867
Individual Paper

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The past decade has dramatic change in local transportation policy and planning in U.S. cities. As auto travel has peaked or even declined, walking, cycling, taxi services and goods movement have increased dramatically nationwide. Public transit ridership has grown in many cities as well. These gains can be attributed in part to planning efforts to increase the supply of alternatives to driving. However, part of this revolutionary decade is the emergence of private transportation alternatives to private cars by responding to real and perceived demand. Taxi services, goods movement, bike sharing, car sharing, parking management and bus services have developed as private responses to the troubles of congestion, access and mobility.

These private actors both solve existing problems within transport policy, such as limited taxi services or access to bicycles, and introduce new concerns, including allocation of street space. A common thread tying private services together is that they provide meaningful alternatives to driving, which may help reduce dependence on automobiles for getting around. However, while reducing auto usage is a desirable planning goal, private transportation firms operate outside of conventional planning processes. Taxis, shared vehicles and delivery trucks all increase the demand for street space and curb access but contribute little to the maintenance of local streets, and they subvert existing regulations and planning of street space.

In this research I examine two distinct but related aspects of private use of street space. First, I place recent transportation developments in the context of privatization efforts in planning and policy that have occurred over the past few decades. These developments are incremental changes from what came before, and recent developments in taxis, shared vehicles and goods movement are more evolutionary than revolutionary. Second, I look at how private actors are pushing local transportation policy toward narrow goals that may not serve the public best. Currently cities are particularly vulnerable to claims as they are expected to shoulder a greater burden on transportation funding and policy, yet cities are extremely constrained in their ability to raise revenues through taxes and user fees. As cities accept and allow more private firms that promote and accept transportation policies that serve narrow goals just because private dollars are involved, yet evidence suggests that private pressures will lead to public investment.

I use evidence from New York City taxicabs, bike share, traffic enforcement and transit usage to analyze how private actors affect transportation policy at the local level. I connect these data and analyses with the literature addressing privatization of public assets and private governance. Initial conclusions suggest that cities and planners are being pushed into new areas of regulation and policy without public involvement, and that cities are presently poorly equipped to adequately address these new actor in transportation policy.

References


Abstract Index #: 781

BICYCLE EDUCATION: THE MISSING LINK

Safe, convenient cycling for children and adults alike is a common aspirational objective of planners seeking to reduce driving and promote alternative modes of travel. To facilitate this objective, cities have built more bike routes, improved other features of bike infrastructure, and supported policies like Safe Routes to School.
However, there is a missing link in many American cities’ approaches to cycling—bicycle education. A lack of understanding and training leads cyclists to break the law almost daily. In many situations, cyclists and car drivers do not know how to interact. In 2012, 726 cyclists were killed and an additional 49,000 were injured in crashes with motor vehicles in the United States (NHTSA, 2012). Despite the increase in cycling, and serious safety concerns, there is relatively little research or understanding of bicycle education in the United States, among transportation planners or educators (McDonald, 2012). While piecemeal education and training programs are the norm in the United States, the approach in several European countries where cycling among both children and adults is significantly safer and more prevalent is to take a comprehensive, lifecycle approach to bicycle education, with programs and experiences directed to specific ages throughout childhood. While it would need to be geared to the American context, I argue that this approach to bicycle education is a key component of preparing both future cyclists and drivers for safer, saner experiences on the road.

Case studies of several northern European cities’ bicycle education programs, including practitioner and parent interviews, on-site program observation, and reviews of curricula and policies demonstrate this lifecycle approach to education. Cities studied include Copenhagen, Denmark, Utrecht, Netherlands, and Münster, Germany. The cases demonstrate that bicycle education is precisely geared to individual age groups from birth through teens to help build cycling confidence, traffic knowledge, and a contextual understanding of cycling. Many actors are engaged in bicycle education, and local and national transportation agencies have established a range of strategies and policies to teach children how to cycle through cities. Programs include cycling tests, extensive education at a national level, and “traffic gardens,” where students learn cycling in a simulated road environment. Overall, the case studies largely view bicycle education as a social phenomenon, with outcomes measured by planners not just in terms of individual cycling behavior, but community acceptance and support for the mode.

The European model of bicycle education may be a guide for creating a more comprehensive approach in the United States. While infrastructure and enforcement remain key components of multifaceted approach to cycling the US, both individual safety and social acceptance could be enhanced with a more broad-based approach to education that engages throughout childhood.

References


PUBLIC TRANSPORT AND UNEVEN LAND VALUE BETTERMENT: EVIDENCE FROM CHINA AND UK

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Does planning intended for equity always lead to equity as a result of planning? The answer turns out to be no based on two case studies regarding the impact of public transport infrastructure on local property price, respectively in the city of Cardiff, UK and the municipality of Shanghai, China. In the both cases, quantile hedonic analysis suggests that the positive externalities of public transport network are rather unevenly distributed, with the spatial adjacency to public transit adding unproportionally more to the values of most expensive properties than those at the lower end of the local real estate market. This finding presents a paradox, that publicly invested transport infrastructure aiming for equitable mobility may however intensify the economic inequalities within the local property market. Land value tax, in the tradition of Henry George (1879), appears to be a promising and nowadays technologically viable public finance intervention to resolve this problem (Wang et al, 2015).
meantime, a critical reflection is needed on the very conception of equity planning per se. Equity, must not only be a normative planning goal, but also an empirically “fallible hypothesis” (Popper, 1959).

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UNDERSTANDING THE ROLES OF DIFFERENT PLANNING AND ORGANIZATIONAL APPROACHES TO THE SUCCESS OR FAILURE OF FIXED-ROUTE TRANSIT SERVICE CONTRACTING: A MULTIPLE CASE STUDY INVESTIGATION

Transit policymakers have turned to service contracting as a means of reducing labor and other operation costs, thereby potentially improving the cost effectiveness, service effectiveness, and service productivity of their transit services. While much of the US literature on contracting has focused on documenting the cost and other outcome measures of contracting efforts, there has been remarkably little attention paid to the role of planning and other organizational factors in affecting the ultimate success or failure of a contracting effort.

There have been widely divergent outcomes among the metropolitan areas that contract out more than 20 percent of their fixed-route transit services. San Diego and Denver stand out for their high levels of ridership and low costs per rider and per unit of service. San Diego is widely known for its embrace of the transit federation model where a public entity serves as a planning and coordinating body for an array of public and private contract entities. Denver is also known for retaining the higher level planning and coordinating functions for directly operated and contracted services inside the public entity. By contrast, New Orleans contracts out the entirety of its planning and operations functions. The results there are much higher costs per ride and per unit of service than in the prior two cases. Given the seeming importance of these different planning and organizational approaches to the perceived success of contracting in San Diego and Denver and the weaker performance elsewhere, and the relative absence of a focus on these issues in the US scholarly or practitioner literature (although not the international literature), this is an important area of investigation.

The authors use a set of seven US cases to better understand whether there is relationship between the particular approach to fixed-route service contracting and the cost effectiveness, service effectiveness, and overall service productivity of the contracted transit service. These cases are developed using a combination of National Transit Database data, transit agency data, review of agency documents, and key informant interviews. The authors also propose to address a number of secondary research questions about the history, details, operation, and performance of the contract arrangements in each of the case study areas. By focusing on these planning and operational issues, the study represents a very different approach than the typical literature on contracting transit service, which evaluates only the outcomes of contracting in terms of its ability (or inability) to reduce costs as compared to in-house service provision. By contrast, this project explores the importance that less visible planning and operational choices may have on the success of contracting efforts. The lessons from this study should help improve US transit practice by providing a clearer understanding of the role of planning and organizational factors in the ultimate success or failure of contracting initiatives.
The level of accessibility within a region is largely dependent on the quality and amount of transportation infrastructure. Improvements to this infrastructure through investment in transportation inherently change the location of local economic activities by providing greater access to specific locations. Many transportation practitioners and scholars have been touting transit oriented development (TOD) as a way to stimulate local economic development and increase property values for the last 25 years. While there are studies that have found that rail transit proximity and highway accessibility are associated with a higher concentration of firms and employment overall (Cervero et al, 2010; Meija-Dorantes et al, 2012), there has been little empirical research to examine these findings by industry.

Our study examines the geographic distribution of firms within the Washington DC region as a function of rail station and highway accessibility, while controlling for other influential factors considered important regarding firm location decisions. National Establishment Time Series (NETS) data for the year 2010, for Maryland and the District of Columbia, which covers 66 stations of Washington Metropolitan Area Transit Authority (WMATA) Metro service are the primary data source. The data set contains information on the location, size and operating statistics of firms, and each recorded is assigned a North American Industry Classification System (NAICS) code to differentiate the industries of firms. Demographic data are obtained from the US Census.

In this paper, following an analysis of the location quotient of various industries to identify the relative importance of industries within station areas, we use Statewide Model Zones (SMZs) which are equivalent traffic analysis zones in the Maryland Statewide Transportation Model (MSTM) as a unit of analysis, and apply a cross-sectional regression to examine the effects of distance between each SMZ to the nearest Metro station and highway entrance/exit. Distance is measured based on the street network, as opposed to Euclidean distance, controlling for location within the CBD, land use, and common demographic factors, such as residential population (total and/or density), income, age, race and ethnicity. We conduct our analysis by size of firm and by industry type. In particular, accessibility between SMZs through the transportation network is taken into account when incorporating demographic data, rather than simply using data within each SMZ.

Results of this study allow us to examine how proximity to transit and automobile access relates to firm density by firm size and across industries within the DC/MD region. The findings from this study add to the literature of TOD by not only examining the effects of attracting firms to station areas, but also in showing how rail and highway access may attract firms in unison. A greater understanding of this issue is important for local decision makers as it may allow developers to better target their developments to specific industries based on the site’s
multi-modal access. Moreover, results pertaining to the distance of firms from rail access, as well as highway access, are important in the context of land-use planning and zoning for local governments – as firms of various sizes and within different industries might have clearly defined distance preferences that would align with zoning for higher-densities in targeted areas.

References


Abstract Index #: 785

**DOES THE BUILT ENVIRONMENT MATTER? MEASURING THE EFFECTS OF CONTEXTUAL- AND INDIVIDUAL-LEVEL DETERMINANTS ON INDUSTRIAL TOURISTS’ INTENTION TOWARDS BUS TRAVEL BY USING THE HLM ANALYSIS**

Abstract System ID#: 885

Individual Paper

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International tourism organizations have been addressing the issue of contribution of tourism activities in GHG emissions. Many countries, such as France and USA, GHG emissions in tourism have been confirmed mostly from transportation system (Dubois and Ceron, 2006). Moving to the new century, the trend of SLOW is getting noticed by the tourism industry, and employed in tourism products as one of avenues to reduce emissions (Dickinson et al., 2011; Lumsdon and McGrath, 2011). Low-emission travel initiatives have been implemented in an active pace in Taiwan, such as low-carbon tourism and LOHAS (the Lifestyle of Health and Sustainability) slow travel through shuttle or bus travel and electric, and biking modes. Researchers have discussed pro-environmental travel behavior and sustainable mobility of tourists and expected their findings helpful to encourage tourists to be apt to relatively low-emission or greener transport modes. However, little research attention is put on how the built environment influences this kind of tourists’ sustainable choice through direct function and interaction function with tourist’s perception of mode and tour characters.

In addition, there have been more than 110 certificated attractions of manufacture tourism in cities all over Taiwan, which were redeveloped through renovating abandoned or lowly-utilized industrial establishments to accept tourism and recreational activities. The estimates of more than 10 million visits and more than 70 million US dollars of revenues in 2013 show the popularity of the attractions; however, demonstrate the great amount of GHG emission because visitors mainly drive cars to these destinations. Researchers and tourism industrial leaders are calling for the implementation of low-carbon or sustainable travel methods, such as bus or shuttle routes to encourage slow travelers. Therefore, relevant empirical studies focusing on how to encourage these tourists’ shifts to the sustainable way of travel are in an urgent need.

Aiming to understand how the built environment and individual attitudes towards shuttle tours directly and interactively affect industrial tourists’ intention towards this kind of sustainable travel, this research surveyed 710 industrial tourists in 15 destinations. There were 3 main factors at the individual level, including environmental concern, slow travel mode, and tourism benefits constructed based on relevant literature (Dickinson et al., 2011; Lumsdon and McGrath, 2011). In addition, the 5Ds concept was applied to develop the contextual factors based on the notes of Cervero (2003), Cerevro and Kockelman (1997), and Ewing et al. (2009). The HLM analysis was
applied to analyze the direct effects and interaction effects of factors at individual and contextual levels. Several factors, such as characters of modes and the experience in tours at the individual level and street designs and the destination accessibility at the contextual level are found significantly and directly influence tourists’ intention towards slow travel.

References


Abstract Index #: 786
CAPACITY CONSTRAINED ACCESSIBILITY OF HIGH-SPEED RAIL
Abstract System ID#: 883
Individual Paper

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This paper proposes an enhanced measure of accessibility which explicitly takes into consideration circumstances when the capacity of the transport infrastructure, e.g. public transport, is limited. When capacity is constrained, passengers may suffer longer waiting time, resulting in delay or cancellation of the trips. Without considering capacity constraint, the standard measure tends to overestimate the accessibility contribution of the infrastructure. To define and measure the accessibility with capacity constraints, we estimate the expected waiting time and the probability of forgoing trips, based on the M/GB/1 type of queuing and discrete event simulation, and formally incorporate the impacts of capacity constraints into the new measure: Capacity Constrained Accessibility (CCA). The new measure provides a more realistic representation than standard accessibility measure without considering capacity constraints, and CCA absorbs the standard measure as a special case where capacity constraints are not binding.

In this study, we bridge the gap between the accessibility literature and the transit network assignment literature to propose a new accessibility measure that incorporates the capacity constraints in the transit network. We formalize the measure of CCA as the weighted average of accessibilities before and after the new infrastructure. The weights, the probability of forgoing trips and the probability of persistence, are determined by threshold of persistence and distribution of waiting time, simulated based on M/GB/1 queuing model.

To illustrate the differences between the CCA and standard measure, this paper estimates the accessibility change in the Beijing-Tianjin corridor thanks to the Beijing-Tianjin Intercity High-Speed Railway (BTIHSR) opened in 2008. We simulate and compare the CCA and standard measures in five queuing scenarios with different assumptions of passenger arrival distributions, train service distributions, and system loads (i.e. arrival-service ratios).

The results show that 1) under low system loads condition, i.e. unconstrained capacity, the CCA is compatible with and absorbs standard measure as a special case; 2) when demand increases and approaches the capacity, the CCA declines significantly: in two quasi-real scenarios, with average system loads of 70%~90% and peak hour system loads of 110%, the standard measure overestimates the accessibility improvement by 14%~30% relative
to the CCA; and 3) under the scenario with very high demand and unreliable timetable, the CCA is almost reduced to the level before BTIHSR.

Overall we conclude that the new CCA measure effectively incorporates the impact of capacity constraints. It is also responsive to different arrival rules, service distributions, and system loads, and provides a more realistic representation of the accessibility change than the standard measure.

The CCA is a generic method that can be applied in many transit systems whenever capacity constraint is critical, even though the queuing details have to be modified to reflect the specific system characteristics.

References


Abstract Index #: 787

WALKING IN CITIES: INTERACTIONS BETWEEN NATURE AND ACCESS TO DESTINATIONS

Abstract System ID#: 886

Individual Paper

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As an alternative to driving with potential benefits to personal health, local economic development and the environment, walking has garnered substantial interest from multiple planning subspecialties. Travel and built environment research has increasingly shown that walking in cities can be explained by factors such as intersection density and access to destinations (Ewing & Cervero, 2010; Manaugh & El-Geneidy, 2011). These factors, which are inherently “urban” qualities of a place, do not necessitate that natural features, such as street trees, parks, water features, and vistas, be present for walking to occur. However, research from environmental psychology and public health finds that highly urban, nature-deprived environments exact a psychological toll on individual wellbeing, and being in areas with nature can have powerful mental and physical health benefits (Barton & Pretty, 2010; Taylor, Kuo, & Sullivan, 2001; Thompson et al., 2012). Benefits ascribed to walking in nature include reduced stress and hyperactivity, and improved self-esteem and prosocial behaviors. We ask, broadly, whether the benefits observed in these studies are compatible with the highly urban, destination-oriented walking primarily addressed in the transportation literature. Can urban dwellers find access to both destinations and nature, and ultimately how can planners create places that facilitate both types of access for diverse urban populations?

In this study, we hypothesize that walkers will choose more natural places and paths in urban environments if the option is available. We examine nature’s interaction with walkability through two primary sources of walking behavior – a regional travel survey and the GPS-tracked walking paths of study participants in the Washington, DC metropolitan area. Using an index measuring the degree of natural features along streets, we compare the choice to walk both as a percentage of trips by all modes and in terms of route choice. Results confirm that destination access and intersection density are significant correlates of walking. However, nature does play a significant role when the choice is available, shaping where people choose to walk. The findings signify a critical challenge for planners. For myriad reasons, we want people to walk more. However, because people will walk with or without nature, but face potentially negative effects without it, planners are particularly responsible for
providing urban populations with places that effectively maximize both baseline walkability through destination access and the enhanced individual benefits of nature.

References

Abstract Index #: 788
UNDERSTANDING ELECTRIC VEHICLE ADOPTION
Abstract System ID#: 890
Individual Paper
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As part of the response to concerns over rising oil costs, energy security, and climate change, there is effort to promote energy efficient and alternative fuel vehicles. In the U.S., there have been increases in Corporate Average Fuel Economy (CAFE) standards as well as federal and state incentives toward hybrid electric vehicles (HEVs) and, more recently, plug-in hybrid electric vehicles (PHEVs) and battery electric vehicles (BEVs). PHEVs and BEVs, the focus of this study, can collectively be referred to as electric vehicles (EVs).

EVs reduce or entirely negate gasoline or diesel use in vehicles through integration with the electric grid. PHEVs can draw from a battery as well as liquid fuel. BEVs are solely powered through electricity. Both provide the opportunity for power-sharing with the electric grid and can potentially ease the integration of sources of intermittent renewable energy (Richardson, 2013). This is a potentially important technology to help reduce greenhouse gas emissions, local air pollution, and vehicular noise (Brady and O’Mahony, 2011; Hawkins et al., 2013). In recognition of these benefits, the U.S. in 2009 set a goal of putting one million electric vehicles (EVs) on the road by 2015. This goal is far from being reached. As of the end of 2014, approximately 290,000 EVs have been purchased in the U.S (EIA, 2014). Hawaii and California lead the U.S. in the highest shares of new BEV sales – though rates are still under 2%.

The barriers to EV adoption are largely due to their higher upfront cost, limited driving range and lack of charging networks (Carley et al., 2013; Sierzchula et al., 2014). This study will build understanding of potential EV adoption in Hawaii, where travel distances are relatively limited and there have been substantial efforts to develop a public charging network. (Public parking lots in Hawaii with more than 100 spaces are required to equip at least one stall with EV charging infrastructure.) This study will assess the “true cost” of owning an EV (based on best selling models) in Hawaii, per county, in comparison to internal combustion engine (ICE) and HEV vehicles. Factors such as regional electricity prices, typical commute distances, insurance and maintenance costs and purchase prices will be used for model calibration. Additional considerations are made for whether a household has solar photovoltaic (PV), as Hawaii also has some of the highest rates of PV penetration in the U.S. The model will focus on the impact of federal financial incentives to better understand the role of policy in influencing total ownership costs (and implicitly EV adoption) – particularly in the decision to purchase or lease an EV. This may be impactful because federal tax credits are not necessarily passed on to the consumer in whole if the vehicle is leased from...
the dealership. Moreover, leasing may have substantial impacts to how consumers use and maintain batteries over, thus affecting potential vehicle-to-grid opportunities.

References


Abstract Index #: 789
DEMONSTRATING THE BENEFITS OF GREEN STREETS FOR ACTIVE AGING
Abstract System ID#: 893
Individual Paper

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Background
The aim of this project was to help demonstrate how “green streets” contribute to the well-being of a community, including the physical and mental health of older and younger adults. Green streets are streets that incorporate natural, landscape-based features that reduce stormwater runoff and accommodate multiple travel modes, particularly walking and bicycling. Green streets are relatively new in practice and there is very little published research directly evaluating their multiple potential benefits, particularly secondary benefits (e.g. travel behavior and social interactions). The primary objective of this paper is to assess the relationship between green streets and physical activity, social interaction, and neighborhood social capital. The hypothesis is that the green street features may make a neighborhood better for walking and encourage more outdoor activity. This, in turn, may increase social interaction and capital. All of this could positively affect physical and mental health. We were particularly interested in examining potential differences between older (65+) and younger adults.

Methodology
The study included two treatment and two control areas within the Lents Neighborhood in Portland, Oregon. The neighborhood is suburban in character, consisting primarily of modest, single-family detached homes, with some small apartment buildings. We conducted walkability audits of the four areas, using 12 older adult volunteers who audited nearly 400 street blocks. We conducted a mail-out/mail-back survey to all residences in the four areas, with a response rate of 26% (n=572 households and 748 individual adult surveys). The survey respondents were predominantly homeowners. Just over half were women and over 70% were white. A sizeable share (16% to 27%, depending upon the area) were 65 years old or over.

Key findings
Residents in the one of the two green street areas did report walking more often than the other areas. To help account for the influence of other factors, we estimated a linear regression model, with the total number of times per month the respondent walked from home as the dependent variable. One of the green street areas was still a significant factor in predicting walking frequency, even after controlling for demographics (renter, age, driver’s license, physical limitations), attitudes towards walking, and self-reported perception of places within
walking distance from home. There were also some significant differences in self-reported increases in walking or perceptions of the neighborhood for walking since the green street features were installed.

We did find that residents in the two green streets areas waved, said hello, and stopped and talked with their neighbors more frequently than residents in the two control areas. There were not significant differences in other types of interactions, such as going to a neighbor’s house to socialize or asking a neighbor for help. In addition, 37% and 40% of the residents in the green streets areas said that their neighborhood was now a better place to live, which was significantly more than in the control areas.

When we compared older adults (65+) to younger adults, there were some differences. Older adults were less likely to say that the green streets make walking in their neighborhood more pleasant and more likely to say that the green streets make parking on the street more difficult and driving more difficult.

References


Abstract Index #: 790

URBAN AMERICA'S RESPONSE TO THE EMERGENCE OF ELECTRIC VEHICLES: EVIDENCE FROM NEW YORK CITY

Abstract System ID#: 899
Individual Paper

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Despite escalating market share of electric vehicles (EVs), their large-scale adoption faces such structural challenges as a shortage of charging infrastructures and low range of electric batteries. An inadequate number of charging stations in urban America negatively impacts consumers’ willingness to pay for EVs and may impede wider adoption. In order to address potential market failures, governments have employed a number of policies. The State of New York, for instance, in cooperation with the National Environmental Policy Act (NEPA) and the New York State Energy Research and Development Authority (NYSERDA) has launched ‘NY Charge’, a statewide initiative to provide a network of up to 3,000 charging stations and electrified parking spaces (EPS). The State's goal to increase the number of on-road EVs to 40,000 in 2018 and a million by 2025, although ambitious, indicates New York’s long-term plan for EVs adoption. This goal cannot be reached without an adequate number of charging infrastructures.

Bracketing many uncertainties about a number of factors influencing adoption of EVs, relatively little is known about the importance of the urban built environment or the role of mixed-use properties in shaping demand for EVs. Mixed-use properties, as promoted by the State and sponsored by a couple of private firms, are dual or multi-functional lands which aside the primary function, provide EVs’ charging facilities (e.g. ‘park and charge’ infrastructures located in shopping centers or EPSs). However, availability of charging infrastructures in Manhattan is not the only physical attribute of the City that may impact EVs market share. The 400% decline in the number of Manhattan’s gas stations over the last decade could also be another factor affecting the number and composition of on-road vehicles, a classification that has traditionally been dominated by internal combustion engine vehicles (ICEVs).

Accordingly, a question of interest for planners concerns the effects of these two phenomena—mixed-use properties and number of gas stations—on EVs adoption. This paper analyzes these effects and reports findings
of simulation experiments with policy scenarios in which successful transition to the State’s long-term goal for non-fossil-based fuel modes of transportation is catalyzed.

We proceed by conducting a survey of empirical studies on private vehicle daily-commuters which travel to or from one of the Manhattan’s traffic analysis zones (TAZs) and categorize variables influencing travelers’ choice into five classes of i) land use attributes, ii) commuter’s attributes, iii) trip attributes, iv) vehicle attributes, and v) fueling/charging station attributes. The marginal contribution of urban form to travelers’ choice is then estimated through a mixed multinomial logit model (MMNL). Using estimated elasticities, a number of scenarios are developed to analyze i) the role of mixed-use land policy that increases availability of charging facilities to EVs and ii) the influence of the shrinking number of Manhattan’s gas stations in EVs adoption.

EPSs and electrified charging stations are both being heavily supported, financially and politically, by New York City and New York State and will receive more of such support in future, as announced by the State. Yet, for successful transition to alternative fuel-based transportation, the effects of urban form on EV adoption must be investigated and the significance of land use policies on modal share of non-fossil fuel vehicles must be further investigated.

References

still know very little about how service reliability influences demand – i.e. whether reliability can be used as a tool to increase patronage. My research aims at providing new information to transit managers using new data and methods, and consequently facilitating formulation of future policies that can potentially rejuvenate the U.S. public transit industry.

My study specifically explores the role service reliability plays in determining bus transit ridership. Using time point stop level service supply, demand, and performance data from the Los Angeles Metro bus system, I investigate whether reliability of a [directional] line serving a stop influences the number of passengers boarding the line at that stop, controlling for various other established factors affecting demand. This cross-sectional analysis of the variation in line boardings across about 1300 sample [time point] bus stops served by about 300 directional bus lines over a strategically-selected six-month study period (December 2011 - May 2012) uses a historical archive of real-time geo-referenced vehicle location data, and focuses on five different time periods, peaks and off-peaks, of a typical weekday. By evaluating three different measures that capture multiple dimensions of bus service reliability, and by estimating a series of regression models, I find systematic evidence that higher average service punctuality (or schedule adherence), consistency in the level of punctuality over time, and lower variation in schedule deviation over time are associated with greater ridership, all else equal, particularly during the AM and PM peaks. This study also provides first empirical evidence that the effect of reliability on peak-period ridership is moderated by headway; demand for reliability seems to be higher for lines with relatively longer headways (highest in the 20-30 minute headway range).

The findings indicate that service reliability influences transit mode choice and/or line/route selection, and suggest that system-wide ridership gains can be expected from reliability improvements in the presence of latent demand for transit travel. From an urban planning perspective, this study provides more proof that good service quality can effectively compliment transformations in the urban fabric brought about by coordinated land use – transit plans to promote transit use.

References


Abstract Index #: 792

**USING MICRO-LEVEL DATA TO EVALUATE WALKABILITY AROUND BUS RAPID TRANSIT STATIONS: A CASE STUDY OF XIAMEN, CHINA**

Abstract System ID#: 905
Individual Paper

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China has experienced rapid car-oriented suburbanization in the past decade and is facing emerging challenges such as congestion, air pollution and health threats. Transit Oriented Development (TOD), designed to encourage the use of public transit by creating pedestrian-friendly urban environment, has been used as a tool to decrease
car-dependence in North American cities for decades (Boschmann and Brady, 2013; Cervero et al., 2004). Recently, Chinese cities have started to adopt TOD strategies. Since a walkable environment is one of the aims of TOD, it is critical to evaluate and improve the walkability of station areas. Although much research has been conducted in the walkability field, few existing studies have examined the pedestrian environment around transit stations at a micro-level. This research will fill this knowledge gap and provide lessons for transportation and land use planning using an international case study.

This research will use various walkability measures to investigate the built environment around stations of the Bus Rapid Transit (BRT) No.1 Line in Xiamen, China. Before 2007, Xiamen had no rapid transit system and the BRT No.1 line was the first rapid line to accommodate a large number of passengers from the suburb to downtown. The total length of the No.1 line is 32.6km with 22 stations, including many important nodes, such as the high-speed railway station, Zhongshan commercial district, the international airport and piers.

This study defines half mile buffer centered on each station as the spatial unit of analysis. Geographic Information Systems (GIS) and field audits will be employed to measure the built environment characteristics for each spatial unit of analysis. Built environment variables will include residential density, land use mix, and infrastructure (e.g. completeness of sidewalks, street lights coverage density, trees coverage density, transit station parking, street density, and intersection density). GIS data will be obtained from the Xiamen Planning Bureau. Microdrones MD4-1000 type four rotor unmanned aerial vehicle (uav) will be employed for micro-level GIS data collection. Field audits would also be conducted for verifying and collecting additional data.

The results of this analysis would reveal detailed characteristics of the walkability of the built environment around the BRT No.1 line stations. These results would help assess the quality of the pedestrian environment and the type of infrastructure that needs to be added or improved for each station area. The findings would not only provide empirical support for improving TODs in Xiamen, but offer a lesson to North American planners on how areas around transit stations could be retrofitted to improve the pedestrian environment.

References

**Abstract Index #: 793**

**AN ANALYSIS OF AGGLOMERATION EFFECTS IN THE PROXIMITY OF METRORAIL STATIONS IN THE WASHINGTON, D.C. METROPOLITAN AREA**

**Abstract System ID#: 911**

**Individual Paper**

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Firm location decisions are influenced by a multitude of factors, ranging firm type (market based versus resource based) to land costs to labor force availability. These decisions have a major impact on a region’s economic development landscape as well as the overall accessibility of the region. Agglomeration economies can arise more easily in areas with high firm concentrations (Cohen and Paul, 2005, Hoover and Giarratani, 1971). A case study done by Mejia-Dorantes, Paez and Vassallo in 2011 hypothesized that transit stations increase the desirability of the surrounding area for firms, and thus facilitate growth of agglomeration economies. Their study explored the patterns of firm distribution for different industry sectors around several metro stations that began operation in 2003 in Alcorcan, Spain; Alcorcan is southwest of Madrid City and connected to Madrid’s CBD by metro. This study used a multinomial logit model (MNL) to predict the likelihood of a given site being occupied by a firm in a specific activity in 2007 (i.e. retail firm versus manufacturing firm) by variables that measure distance...
from each location to the closest location of public transit infrastructure/service, highway infrastructure, and the
center of downtown, as well as street density and population density. The model also included variables of
“sector-specific occupancy ratios” in which the number of establishments of type i (within a specified radius) was
divided by the total number of sites in that area in 1998. These variables account for the assumption that the
types of other firms in the area influence firm location. Their results indicated that industry-specific spatial
clusters arose in relation to an increase in transit accessibility because of the opening of the metro stations.

Following the study by Mejia-Dorantes, Paez and Vassallo, we examine whether significant industry-specific
spatial clusters have developed in relation to the presence of Washington Metro Area Transit Authority (WMATA)
stations with a special focus on the nine stations that opened between 1999 and 2004. We use data from the
National Employment Time Series (NETS), which provides geo-referenced information on individual firms such as
firm name, birth year, and North American Industry Classification System (NAICS) code. Data from five years prior
to the first opening to five years after the last opening (1994-2009) are used to establish baseline trends and
capture any slow-developing trends. Processing the data with a Geographic Information System (GIS) allows for
the analysis of industry-specific firm densities (using kernel density statistics). Additionally, regression analysis is
used to examine the effects of transit station accessibility, controlling for other factors, such as population
density, highway accessibility, demographics of residents, and distance to downtown Washington, D.C..

If the results from the 2011 Mejia-Dorantes, Paez and Vassallo article hold true for the Washington, D.C. metro
area, we would expect to see increased firm density for market oriented industry sectors close to the metro
stations over the time span. The firm location pattern changes are expected to be a result of the changes in
accessibility associated WMATA station openings in addition to other factors incorporated in this paper’s models,
such as agglomeration economies and other neighborhood characteristics. The findings of this paper will
contribute to the understanding of which industry sectors transit-oriented firm location occurs in and, to what
extent transit stations impact this growth. Subsequently, planning professionals in real estate development,
urban planning and transportation planning will be able to make more efficient decisions about Transit-Oriented-
Development (TOD).

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Abstract Index #: 794

OVERTURNING PLANNING MECHANISMS THAT CONTRIBUTE TO SPRAWL: CALIFORNIA’S SWITCH FROM LEVEL
OF SERVICE TO VEHICLE MILES TRAVELED IN TRANSPORTATION IMPACT ANALYSIS

Abstract System ID#: 913
Poster

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It has been argued that common land use controls, such as Euclidean zoning, setbacks, and minimum parking
requirements have contributed to sprawl (Pendall, 1999). Another potential contributor to sprawl in the planning
process is the use of Level of Service (LOS) to measure roadway performance. When the traffic impacts of
development projects are analyzed, they are traditionally measured in terms of the LOS impacts to surrounding
roads. If a project loads too many vehicles onto nearby roads such that those roads exceed LOS standards, two
things usually occur. Either capacity is expanded (e.g. road widening, new roads), or the size of projects is
reduced. Both actions have the impact of reducing density, consuming more land, and pushing development outward— in other words, sprawl. Lower densities and outlying development are also correlated with more driving and less use of alternative modes (Ewing and Cervero, 2010).

LOS-based transportation impact analysis can also characterize alternative transportation investments such as road diets or installation of transit-only lanes as negative impacts rather than enhancements due to their effect on automobile capacity. A prominent example of this is the San Francisco Bicycle Plan which was stalled for four years due to a successful LOS-based challenge (Henderson, 2011).

In response to these issues, California passed Senate Bill 743 in 2013 which prohibited the use of LOS in transportation impact analysis under the California Environmental Quality Act. The California Office of Planning and Research (OPR) has proposed LOS be replaced with VMT (Vehicle Miles Traveled). This research investigates how traffic impact analysis can be performed under a VMT-based analysis process. To perform VMT-based traffic impact analysis, we need to answer two central questions: (1) How do we estimate the VMT of proposed projects? (2) How do we judge VMT?

The first question is relatively easy to answer. Existing methods allow us to estimate project-level VMT. The second question however is more difficult. Up until now, VMT has simply been a statistic. Now that VMT is an evaluation metric, we now need to place value judgments on VMT. How much VMT is so high that it constitutes a significant impact on the environment?

OPR has proposed that projects in California be evaluated relative to the VMT rates of existing development of similar land uses within the same region. However, this research has found that there are technical and feasibility issues that still need to be worked out with this proposal. We cannot readily calculate this region-specific, land-use specific existing VMT figure from existing information. There are ways to theoretically determine this missing information, but this may be difficult and expensive. These challenges will need to be solved before VMT can become a usable impact analysis metric that can meet the goals of SB 743 to reduce sprawl and encourage transit-oriented development.

References

Abstract Index #: 795
EXAMINING UNMET DEMAND FOR MOBILITY: TRAVEL PURPOSE DIVERSITY AMONG LOWER WEALTH HOUSEHOLDS IN BOGOTA, COLOMBIA
Abstract System ID#: 917
Individual Paper

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In the world’s developing cities, rapid increases in the use of private cars is associated with a number of negative consequences, including deteriorating air quality, dangerous traffic conditions, and decreased economic productivity. The burden of these consequences is borne disproportionately by the poor. Paradoxically, many approaches to reining in rising car use—such as congestion pricing and driving restrictions—undercut the mobility of lower wealth households. As an alternative, a growing number of cities are investing heavily in mass transit systems as a means to both limit the negative impacts of increased car use and improve mobility across all socioeconomic strata. However, there is little evidence to date regarding whether such investments can provide an acceptable alternative to driving, particularly in the context of rapidly motorizing developing cities.
Understanding the mobility impacts of transit interventions is hampered by a lack of valid, readily available indicators of unmet travel needs. The primary objective of this paper is to introduce a potential metric—travel purpose diversity—to represent the degree to which an individual’s or household’s travel needs are unmet. This metric is based on theoretical frameworks that suggest the greater variety of activities individuals engage in outside the home, the less likely they are to experience unmet travel needs and the better their overall quality of life (Lucas 2012). In the context of a developing city, with low but rising levels of car ownership, transit-based interventions that improve mobility will, theoretically, enable people with access to the system to fulfil a greater diversity of travel purposes (and engage in a greater variety of activities) than those without access to the system, all else equal. I address this objective in the context of Bogotá, Colombia.

A secondary objective is to examine the impacts of Bogotá’s TransMilenio BRT system on mobility patterns—including travel purpose diversity—of the city’s lower wealth households. TransMilenio was introduced in 2000 and has been widely praised for positive impacts on transit ridership, congestion, safety, and air quality. Despite overcrowding, delayed expansions, and political controversies, TransMilenio is considered the gold standard for low-cost sustainable urban transport around the world. However, prior research has found significantly higher rates of car ownership among lower wealth households with access to the BRT system, relative to pre-BRT conditions (Combs & Rodríguez 2014). Whether this rise in car ownership is signalling a response to a loss of mobility brought about by TransMilenio is unclear. If it is, it calls into question the system’s long run viability as a just, sustainable transport system.

Methods: I used a difference-in-differences research design to examine changes in total tours completed, tours completed by mode, and travel purpose diversity at the household level. I used count regression models to estimate total tours and tours by mode. Travel purpose diversity was modeled via generalized ordered logistic regression. Travel data come from city-wide household mobility surveys conducted approximately five years before and after TransMilenio’s introduction.

Findings: Travel purpose diversity increases with car ownership, bicycle ownership, wealth, and household size, which suggests that, in the context of Bogotá, travel purpose diversity is greater in households with greater demand for travel. This finding lends support to the metric’s validity as a measure of mobility.

There were no consistent, significant relationships between BRT access and any of the travel outcomes. Thus, even though members of lower wealth households make up the majority of TransMilenio’s ridership, the system appears to have had little measureable impact on the mobility of lower wealth households. However, additional research is needed before we can safely draw conclusions about how well any of the metrics examined here reflect changes in mobility due to transit investment, particularly in low resource, mobility-constrained settings.

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There have been extensive efforts to understand the interaction between land-use characteristics and household travel behaviors. Transportation scholars have attempted to measure the effects of land-use-oriented approaches on changes in travel behaviors. In this context, another critical dimension is price-oriented policies such as higher gas taxes, mileage taxes, and emission charges. Given that the national goal of greenhouse gas reduction cannot be achieved by technical or pricing schemes alone, transportation planners need to understand additive or considering land-use together with other policies.

While pure experimental designs related to both land use measures and price policies are very expensive, recent fluctuations in gas prices can be used as a natural experiment. In other words, people may have responded to unexpected gas price changes around 2009 in similar ways to how they would behave under governmental pricing policies.

Our preliminary research has found that Atlanta residents increased their trip chaining in response to high gas prices in 2009, which was one way of economizing household travel. Our next step is to compare findings from the Atlanta metro area to other regions’ household travel behaviors in order to understand how regions with more alternative travel options have been different from regions with fewer options, such as Atlanta. This comparative research is expected to reveal how regional land-use characteristics can make a difference under increased driving cost conditions in an effort to reduce greenhouse gas emission.

The San Francisco metro is selected as an example of less-sprawled metros with more alternative travel modes. San Francisco had high scores among the largest US metros in terms of compact development patterns in 2000 and 2010, which were calculated by Ewing and his colleagues. Also, San Francisco had similar population size to Atlanta in 2000, though Atlanta grew more than San Francisco in the 2000s. The preliminary analysis revealed that San Francisco households made more transit trips in response to high gas prices, which could not be found in Atlanta around 2009.

The final results would include different adjusting travel behaviors by the households in San Francisco and Atlanta; (1) shift of less to more efficient household vehicles, (2) change in mode choice, (3) reduction in out-of-home activities, (4) reorganization of household trips while having the same out-of-home activity levels, e.g. increase in trip chaining, and (5) change in destination choice, e.g. neighborhood groceries closer to homes versus regional shopping malls farther from homes.

References

Local governments set street minimum width and cross-section design for local neighborhood streets. Because local streets typically require no more than two traffic lanes, minimum width of 26 feet or wider automatically produces at least one parking lane on the street, making this requirement a de facto parking policy. One rationale behind the mandate is technical necessity for safety concerns such as traffic and emergency vehicle access. The other one is market amenity to provide extra parking for residents and visitors. There is, however, no consistent empirical evidence to justify either rationale. Our previous research shows that the argument for ensuring traffic safety by adopting minimum street width does not stand. Such an argument is not supported by fire codes, most of which do not require a clearance beyond 20 feet. Many local governments do allow narrower streets in private communities - which the developers, instead of the local governments, are responsible for services and infrastructures. If the rationale behind the minimum street width is to correct market failure and eliminate negative externalities of narrow streets, it is unclear whether current street standards are the most efficient policy response. Residents’ preference towards residential on-street parking is an unstudied piece in the debate of street width and street parking mandate. It is critical to understand whether wide neighborhood street is an efficient market outcome driven by consumer demand.

This pilot study is a first attempt to understand consumers’ preference on wide street in American suburbia and whether it justifies local government’s action to impose minimum street width. We utilize an online stated-choice survey in order to estimate residents’ willingness-to-pay and connect with the real price associated with constructing and maintaining a street and its on-street parking space. This study surveyed a stratified random sample of 9,169 residents living in suburban single-family homes from 21 cities in 12 metropolitan areas. The selection of targeted survey areas encompasses two key parameters: distinct street standards practices and a variation of street widths. We have chosen cities with both private and public communities in order to witness street width variations and discrete government policies on regulating local street width. We received 298 surveys with 216 included in the final analysis.

The result shows a significant mismatch between resident’s willingness-to-pay and the actual cost of constructing and maintaining one lane of on-street parking in front of the residence. On average, resident’s willingness-to-pay is far less than the actual cost. Depending on the interest rate for capital and maintenance loans, we estimate only 8% to 14% of the residents surveyed are willing and able to pay up to the actual cost associated with one parking lane in front their residences. Residents living on the narrowest streets (less or equal to 20 feet) and the widest streets (greater or equal to 30 feet) have the lowest values in their willingness-to-pay. The result suggests that residents living on relatively narrow streets are less likely to be willing to pay for wide streets and are more satisfied with their current street width. Such a result also indicates that for those currently choose to live on narrow streets, free market may work better than a government-intervened market. Street standards adopted by the local governments are over-supplying street width for residents who currently live on excessively wide streets. Consumer demand of wide street and on-street parking does not widely exist. Well-established and widely institutionalized street standards appears to be the sole force in producing excessively wide local streets.

References
AN ACTIVITY-BASED APPROACH TO MEASURING THE EFFECT OF LAND USE MIXING ON PEDESTRIAN TRAVEL

Urban policies have emphasized the importance of mixing land uses in a neighborhood as an intervention beholding of lasting planning and public health benefits. Transportation planning research has identified the potential of efficiency gains achieved by increasing land use mix and the subsequent shortening of trip lengths; whereas, public health research has accredited increased land use mixing as an effective policy for facilitating greater physical activity. However, despite the transportation, land use, and health benefits of improved land use mixing and the extent of topical attention given by researchers, no consensus has been reached regarding the magnitude of its effect on active travel behavior. Absence of agreement may largely be attributed to theoretical and methodological failings persistent in past attempts to measure the land use mix construct. This research identifies these limitations and provides direction on the choice of land use mix measure and spatial scale at which to analyze the construct’s relationship with pedestrian travel. Specifically, this study examines the link between walking and land use mix by (1) quantifying the functional complementarity, composition, and spatial configuration of different land use types and (2) modeling the impact of land use mixing when operationalized at varying fixed and sliding spatial scales.

A theoretically sound measure of land use mix depicts the functional complementarity of land use types within a neighborhood by matching the land uses specified in a composition measure to activities with an established synergy. This study measures functional complementarity rather than land use heterogeneity by relating the activities conducted on a tour to the land use types specified in a mix measure. Additionally, rather than supposing an equal distribution of heterogeneous land use types reflects an ideal level of mix, this study explores the measurement of composition based on the activity generated by a land use instead of its spatial footprint. Apart from land use composition, this study examines the paired concept of spatial configuration since the increased proximity of land uses associated with a fragmented spatial pattern has a hypothesized link to increased pedestrian trip generation.

Adoption of a single operationalization strategy for measuring the relationship between land use mix and travel has become commonplace because of data availability and convenience, but has limited theoretical support. Pedestrians are unlikely to consider arbitrary administrative boundaries when deciding if or how to reach an activity location. Accordingly, this study compares these fixed as well as sliding scale depictions of land use composition and configuration to better inform past conceptualizations of these neighborhood effects on pedestrian mode choice. Moreover, this study provides a tour stop analysis of land use mixing since the mix of land use types at the origin and destination of travel is hypothesized to matter differently for diverse travel contexts (e.g., travel mode, tour purpose).

This study analyzes the impact of land use mix on pedestrian travel within a structural equation modeling framework. Travel, sociodemographic, and economic data for individuals within the Portland, Eugene, and Salem metropolitan regions were provided by the 2009-2012 Oregon Household Activity Survey. Land use data representing the development patterns, transportation systems, and urban design of the study area were provided by local and regional transportation agencies in each region. Supplemental neighborhood-level residential and employment data were provided by the 2010 US Census and Longitudinal-Employer Household Dynamics, respectively. Results of this study provide greater specificity in the measurement of land use mix to policymakers and practitioners interested in the pedestrian travel outcomes associated with implementation of this smart growth principle.

References

Connections between private car use and popular health are well researched, with car dependency regularly associated with poor health outcomes. In the context of the transport-health nexus, public health research often seeks to address the problems inherent to private car use via the promotion of active forms of transport such as walking, cycling and public transit. Despite this endorsement, there remains resistance to active transport. While there is evidence that some cities have experienced an increase in the uptake of the use of active transport, private car use continues to dominate as the preferred way to satisfy requirements and desires to be mobile in many urban areas.

Programs to increase the uptake of active transport often include strategies to foster awareness of its personal benefits, such as education about the health benefits associated with physical activity. This paper reports the results of a study which used qualitative methods to explore the way the physical activity incentive is perceived by car-drivers when presented with a viable active transport alternative. Its focus is on the journey to work in outer suburban Sydney – Australia’s largest city. Applying a novel approach to participant selection, the paper explores the daily practices and perceptions of those who continue to drive, despite having access to viable alternative transport.

The paper confirms the findings of other research suggesting that knowledge about the benefits of regular physical activity will not necessarily translate to the uptake of active modes of transport. This understanding is advanced to suggest that the endurance of the private car is not solely a product of rational factors such as awareness of alternatives or physical capacity. Instead, automobility is deeply embedded in ways of navigating modern life, and barriers to active transport are more complex than research to date suggests.

Will young adults return to driving when the economy recovers?

During the Great Recession, the economic condition of young adult in the United States was poor indeed. Earnings stagnated and record numbers of young, would-be workers struggled to find jobs. In response to these economic constraints young people moved back in with their parents, put off marriage, and delayed having children.
The travel behavior literature has long recognized a close link between travel patterns and an individual’s economic resources, employment, and roles. Employed adults and parents, for example, each make more trips on average than adults without jobs or children.

As the economy recovers and young people head back to work, move out, and start families of their own, will they once again embrace driving?

To answer that question I first identified four distinct traveler types using latent class analysis. The seven variables used to determine the traveler types incorporate travel over a single day (miles of travel, number of trips, and share of miles by an automobile) and over a more extended period (automobiles per adult in the household, diver’s license, annual miles driven, and frequency of public transit use in the past month). The data for this analysis comes from the United States national household travel surveys in three years: 1995, 2001, and 2009. I find that young adults can be categorized into four mutually exclusive traveler types: Drivers, Long-distance Trekkers, Multimodals, and Car-less.

I estimated a series of multinomial logistic regression models with traveler type as the dependent variable. Two factors serve as key explanatory variables: Roles (employment, living arrangement, married, has a child) and Resources (household income quintile and educational attainment). I control statistically for differences in Residential location and Race/ethnicity.

I find that Roles and Resources are among the strongest predictors of traveler type. Moreover, the relationship between these factors and travel behavior became stronger over time. Together these results suggest that if good jobs return, young people will embrace driving once again.

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BUY HERE, POOR HERE? PREDATORY LENDING IN THE AUTOMOBILE INDUSTRY

In 2011, Ken Bensinger, a writer for the Los Angeles Times, published an exposé on the Buy Here Pay Here (BHPH) automobile industry. A growing sector of the market, BHPH automobile dealers sell and provide ‘in-house’ finance on used cars to low-income consumers who have either limited credit histories or low-credit scores that restrict their access to conventional credit markets. In this three-part series, Bensinger highlights abuses in the industry which include sale prices that exceed Blue Book value, excessive interest rates, and high default and repossession rates. The articles motivated two pieces of legislation signed into California law—AB 1447 which mandates that dealers provide warranties on all used cars and AB 1534 which requires dealers to disclose in writing the fair market value of each vehicle for sale.
The flurry of activity on BHPH dealers in California garnered significant national attention. Yet information on the industry is largely based on anecdotal evidence. Unlike mortgage lenders who are required by law—the Home Mortgage Disclosure Act (HMDA)—to report lending data, no such reporting requirement currently exists for automobile loans. Anecdotal evidence suggests that the industry is fraught with abuses which greatly disadvantage low-income households. However, BHPH dealers may also provide a valuable public service by facilitating automobile ownership among low-income consumers who desperately need the access to opportunities that automobiles provide.

We are interested in the ways in which BHPH dealers enable and/or exploit low-income consumers. In this paper, we focus on whether the BHPH industry strategically targets low-income consumers. We first use spatial analysis to assess whether BHPH dealers in California are more likely to locate in close proximity to particular types of consumers (by income, race/ethnicity) than other dealership types. We then use discourse analysis (DA) to investigate the assumptions and ideologies implicit or explicit in written and visual material, how such material is structured and organized, and how advertising is used to manipulate, legitimate and manufacture consent.

Our findings will inform strategies to facilitate improved financial inclusion in automobile lending, including the role of consumer regulation, policies to increase the supply of low-cost lenders, and financial literacy education. If low-cost credit is an integral part of everyday life in economies where wage inflation is largely stagnant for most income groups outside the top quintile, how can and should it be provided? What types of regulatory approaches should be enacted to protect consumers yet safeguard consumer options?

References


Abstract Index #: 802
THE IMPACT OF SB 375 ON REGIONAL TRANSPORTATION PLANNING
Abstract System ID#: 979
Individual Paper

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I propose to evaluate the impact of The Sustainable Communities and Climate Protection Act of 2008 (SB 375) on GHG reduction in California cities. SB 375 empowered Metropolitan Planning Organizations (MPOs) to influence local land use and transportation project selection to improve regional connectivity, thereby reducing congestion, total miles driven (VMT), and GHG emissions. This paper will provide an analysis of competitive project grant programs administered by MPOs before and after SB 375 to determine whether SB 375 has provided incentives for more sustainable projects, and, if so, which types of sustainability projects have the greatest chance of gaining funding based upon the criteria ranking performed by the regional planning organizations.

It has long been theorized that regional planning can address negative externalities of the city, including growing urban inequality, environmental damage from sprawl and increased congestion. Unfortunately, substantial roadblocks exist to the creation of powerful regional planning organizations, including municipal land-use control, competition between jurisdictions for tax-revenue, and the growing dependence on local transportation funding.
These have prevented meaningful regional planning in all but a handful of cases. Paul Peterson (1981) argued that regional planning could only be increased through state- or federal-level legislation. Simultaneously, there is growing concern that environmental problems must be dealt with at the regional scale, as ecosystem boundaries are defined independent from political ones.

Transportation emissions account for 37% of California’s GHGs, and reducing total VMT is necessary to reach the target GHG reductions. SB 375 encourages regional transportation planning and inter-jurisdictional coordination to reduce VMT through coordination of transportation and planning for housing at the regional scale. MPOs are responsible for coordinating and funding transportation projects in a region, and SB 375 mandates that each MPO create a “Sustainable Communities Strategy” that “describe how the development pattern and transportation network can work together to feasibly reduce GHG emissions...” (Haney, 2010). Barbour and Deakin (2012) referred to SB 375 as “...a test case for smart growth climate policy, which should interest policymakers seeking to implement similar strategies.” The NRDC argued that the law has made clear that “urban growth and development in California will adapt to the times.” (Eaken, A., J. Horner, and G. Ohland, 2012).

I propose analyze the impact of SB 375 on the awarding of grant funding by MPOs in California. MPOs have discretionary funding to fund individual projects that meet regional planning goals. Each MPO publishes criteria and accepts local proposals for grant funding. These proposals are scored according to the criteria and grants are awarded. I propose an analysis that will look at the impact of SB375 on competitive grant programs. Has SB375 changed the criteria that MPOs publicize in calls for grant proposals? Have they changes the factors used and weighting of these factors for grant evaluation? Do the grant recipient projects increase regional transportation planning?

For this chapter I will conduct an analysis for the four major California MPOs. I will first identify criteria and scoring for grant applications before and after SB375. I will then identify the list of applicant projects during those years, and the grant recipients. I will supplement the analysis with interviews of with MPO staff members who were instrumental in drafting the grant criteria.

The goal of this analysis is to understand how the MPO provides incentives for projects that will reduce GHG (such as projects that facilitate access to transit or provide biking infrastructure). I will use the scoring criteria to determine whether there is an increase in sustainability-focused applicant projects and grant awardees. Based on the data analysis and the interviews, I will determine whether SB 375 has increased access to discretionary funding of projects that increase sustainability and reduce GHG emissions.

References

Abstract Index #: 803
EXPLORING SECOND TRIP PATTERNS: AN ANALYSIS OF TRAVEL AT WORK IN PORTLAND
Abstract System ID#: 983
Individual Paper

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The development and implementation of activity-based travel demand forecasting models in US metropolitan areas have made accessible complex datasets on travel behavior. Utilizing data obtained from the Oregon Travel...
and Activity Survey (OTAS), a dataset used to develop the activity-based travel demand forecasting model for Portland, Oregon, this paper proposes a model for understanding mode choice decisions made by individuals while at work.

A second-trip, for the purpose of this research, is defined as any trip which originates from a place of work (or study) and involves a return trip to the same place of work (or study). Incorporating both business and non-business related travel using a nested logit model, this paper seeks to understand the similar and dissimilar characteristics which inform mode choice after arrival at a place of employment. Factors that will be investigated in order to understand second-trip mode choice include both OTAS survey responses and built environment characteristics of both the workplace and place of residence of individuals making second trips.

Given the complexity of understanding mode choice, it is important to develop a model that accounts for spatial factors, generalized cost of travel, and socio-economic attributes of travelers. The activity-based model exists within a framework that views individual travel decisions as complex adjustments in behavior reacting to a demand for activity (Ben-Akiva and Bowman, 27). The availability of places that meet the demand for activity near a person’s home or work has the potential to inform mode choice decisions for travel made at work.

Despite investigations into the influences of socioeconomic, land use, and built environment factors on mode choice and travel behavior, a comprehensive understanding of travel at work is absent from discussions on travel behavior. Past investigations of mode choice decisions have found that attitudes that result in mode choice are not related to personal characteristics, with different travel behaviors often occurring for similar reasons, as stated on travel surveys (Anable, 2005). Past studies of non-work travel have found that land use, when considered independently, is statistically insignificant in understanding non-work travel (Boarnet and Sarmiento, 1998). However, built environment characteristics were found to significantly impact mode choice when incorporating generalized cost of travel and socioeconomic factors into a model (Cervero, 2002). A model developed to understand the relationship of built environment characteristics and auto ownership found that built environment attributes affect auto ownership, though household demographics have a more dominant effect (Bhat and Guo, 2007). The understandings developed in these works help guide the selection of independent variables for the second trip model.

Planners are often employed by business improvement districts, universities, and major employers to implement travel demand management strategies to mitigate the consequences of single occupancy vehicle commuting. This reduces both congestion and negative environmental consequences. This paper seeks to develop an understanding of travel at work and contributes to the dialogue on changing travel behavior to support sustainable mobility.

References

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Why do people comply with the law? Legal scholars consider two perspectives with regard to compliance. The instrumental perspective refers to compliance as a response to tangible—often immediate and monetary—incentives; it assumes that people make decisions because of extrinsic motivations. Economists tend to think of compliance through the instrumental perspective as it makes modeling straightforward, and policymakers often implicitly adopt the instrumental perspective because they control society’s resources. Indeed, most studies have examined transportation law compliance through the instrumental perspective by studying the relationship between crime rate and penalties. The other perspective on compliance is the normative perspective, the theory that people make decisions based on values; it assumes that people make decisions because of intrinsic motivations. The normative perspective, championed by psychologists, is further divided into two components: legitimacy and morality. Legitimacy refers to the extent to which the individual respects the governing body’s right to establish and enforce laws. Morality refers to the extent to which the individual supports any particular law. Previous literature has added the normative perspective of transportation law compliance without considering the relationship between the instrumental perspective and the normative perspective. This paper uniquely examines transportation law compliance through a comprehensive framework of instrumental and normative compliance as well as their interactions in people’s behavior with regard to compliance.

The motivation behind this study is the phenomenon of non-compliance with the car ownership control policy in Shanghai. The explosive growth of automobiles in China in recent years have led to the adoption of car ownership control policies in major Chinese cities such as the car license plate auction policy instituted in Shanghai. However, a significant percentage of drivers in Shanghai have circumvented the auction process and drive vehicles with cheaper, non-local license plates on Shanghai’s elevated roads. Violation of the law at such a high level necessitates the question of how the policy should be altered to raise the level of compliance.

Through data analysis of a survey given to drivers in Shanghai containing questions addressing both normative and instrumental compliance, this paper takes a novel approach in studying the roles of normative compliance and instrumental compliance as well as their crowding effects on each other in people’s behavior in response to Shanghai’s car license plate auction policy. In particular, this study explores the roles of legitimacy, morality, incentives, and reputation and their interactions in the individual’s decision making. By exploring motivations behind compliance, policy makers can adjust the congestion reduction policy to increase its effectiveness in Shanghai and provide a foundation for effective policy in other cities. Moreover, legal authorities and policy makers should seek compliance across all laws and regulations to make governance more effective. Through the lens of analyzing compliance in one particularly important issue, this study provides a step in understanding and establishing conditions that promote compliance with transportation law at a higher level.

References
Are young adults in the United States driving less than they used to be because they live in more walkable and urban environments? To answer that question we first identify four traveler types and classify neighborhoods in the United States. We use the two typologies in descriptive and multinomial logistic regression analysis.

Most studies of travel behavior analyze a single dimension of travel at a time: miles traveled (Taylor et al. 2013), number of trips (Smart et al. 2013), or extent of multimodality (Buehler and Hamre 2014). These may be related to one or more individual dimensions of the built environment, such as measures of residential density or land use diversity (Ewing and Cervero 2010). We expand on those studies by developing holistic measures of both travel and the built environment.

We characterize travel by incorporating mobility, trip-making, and access to an automobile into a single, readily understood variable using latent profile analysis (Ralph 2014). To account for day-to-day variation in travel, we incorporate data on annual miles driven and the use of public transit over the past month when identify the traveler types. The 2009 United States National Household Travel Survey (NHTS) is the source for all traveler information.

To comprehensively characterize residential location, we develop a second typology: neighborhood types. To do this, we utilize the Environmental Protection Agency’s Smart Location Database and data from the U.S. Census. Using cluster analysis, we categorize each census tract in the United States (over 70,000 in all) into mutually exclusive neighborhood types.

Next, we use the two typologies to descriptively explore the travel behavior of young adults in each neighborhood type. Finally, to determine the independent effect of neighborhood types, we estimate a multinomial logistic regression model of traveler type, controlling for other factors known to affect travel behavior. We focus our interpretation of these results on the independent variable neighborhood type.

Our findings suggest the importance of accounting for the multi-dimensional nature of both travel behavior and neighborhood characteristics in order to formulate broadly applicable plans and policies to encourage sustainable travel decisions without reducing access to opportunity.

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IMPACT OF PLANNED TRANSIT ORIENTED DEVELOPMENTS ON PROPERTY VALUES IN HONOLULU, HAWAII

Abstract Index #: 806

Impact of Planned Transit Oriented Developments on Property Values in Honolulu, Hawaii

Abstract System ID#: 1017

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Transit oriented developments are expected to reduce auto-dependency, spur economic development as well as increasing property values in the transit adjacent areas. But some research has shown that due to the 'disamenity zone' immediately adjacent to the transit lines, property values may decrease. On the other hand characteristics like recreational and gathering places seem to positively affect housing prices.

Honolulu is the first city in the United States to implement the fully automated driverless and an above-ground or elevated transit system. The Honolulu Authority for Rapid Transportation (HART) has started construction of the rail that is expected to be completed in 2019. The rail system plans to connect communities with the airport, major shopping centers and downtown Honolulu and reduce congestion. The rail stations are planned as mixed use transit oriented development (TOD) focusing on walking, bicycling and mass transit systems and supporting residential and commercial development. The planned TODs are the Aiea-Pearl City TOD consisting of Leeward Community College, Pearl Highlands, and Pearlridge stations; the Airport Area TOD consisting of Pearl Harbor Naval Base, Honolulu International Airport, and Lagoon Drive stations; The Ala Moana Center station; The Downtown TOD consisting of Iwilei, Chinatown and Downtown stations; The East Kapolei TOD consisting of Ho'opili, University of Hawai'i at West Oahu and East Kapolei stations; The Ala Moana Center station; The Downtown TOD consisting of Middle Street, Kalihi and Kapalama stations; The Waipahu TOD focusing on West Loch Station and Waipahu Transit Center Station.

Using hedonic price models the author investigates the effects of planned TODs along the transit route, on the property values in Honolulu, Hawaii. Hawaii is known for its scenic beaches and beautiful views as well as its excessive congestion and high cost of living. If the rail investment and TODs result in higher property values, the availability of affordable housing could decrease. On the other hand if the property values around the TODs decrease due to the ‘disamenity’ then steps should be taken to reduce the harmful impacts of noise, and vibration on the residents and the tourists.

References

Abstract Index #: 807
EXPLORING SPATIAL RELATIONSHIPS BETWEEN CRASHES AND THE BUILT ENVIRONMENT: A GEOGRAPHICALLY WEIGHTED REGRESSION APPROACH
Abstract System ID#: 1021
Individual Paper

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Traffic crashes are among the five major causes of death in the United States. Researchers are seeking ways to understand the factors that attribute to crashes, with the aim to reduce crash occurrence and severity. The built environment, as described by land use patterns and road configurations, may have important linkages to travel safety: land use patterns along the roads create travel demand which generates traffic volumes; the mixture of
land uses influences the level of conflicts between vehicles, pedestrians, and the environment, which subsequently impacts the type, frequency, and severity of crashes. Road systems, an integral part of the built environment, determine the maximum traffic flow obtainable on a given roadway which also regulates and influences traffic speed, a key determinant of crash severity.

Past studies relied on global statistical models to disentangle the interrelationships between crashes and various characteristics of the built environment (for example, density, land use mix, street layouts, etc.). Although global models are powerful in discerning global relationships, they ignore the special characteristics of spatial data such as spatial autocorrelation and spatial non-stationarity. Most global statistical models require observations to be independent; however, spatial phenomena including crash occurrence are usually spatially correlated: accident black spots, a place where traffic accidents are historically and disproportionately concentrated, can be found in many communities. Global statistical models also assume that the modelled relationships between a response variable and explanatory variables are consistent across the geographic area (spatial stationarity); however, spatial relationship at one location may be unique relative to other locations and hence the “global” parameters estimated by using all available observations may be inadequate to reveal the relationship at any given location.

This research applied Geographically Weighted Regression (GWR) model to understand the relationship between crashes and the local built environment in Detroit Region (containing Wayne County, Oakland County, and Macomb County), where 527,749 crashes happened from 2007 to 2011 according to Michigan Traffic Crash Facts. Our research aim to address two main questions: does the relationship between the built environment and crashes vary across space? If so, what are the local relationships between the built environment and crashes? By estimating local parameters for a regression model at a given location, GWR allows the relationship between variables to vary over space.

The findings of this research would help transportation planners, traffic engineers, and land use planners to better understand the interactions between the built environment and crashes that are situated in their local communities. Our research will also demonstrate the feasibility and values of using spatial models in traffic, transportation, and land use studies.

References


Abstract Index #: 808

**DOES ACCESSIBILITY MATTER? UNDERSTANDING THE EFFECT OF JOB ACCESSIBILITY ON LABOR MARKET OUTCOMES**

Abstract System ID#: 1027

Individual Paper

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For the past decades, urban economists, geographers, and social scientists have raised a question how location and access to employment opportunities affect labor market outcomes such as occupational status, income, and labor force participation. This subject that geographical factors are important in labor market success is based on the spatial mismatch hypothesis. Since Kain’s (1968) spatial mismatch hypothesis, the relationship between
urban spatial structure and labor market outcomes has been debated among many scholars. However, there is no consensus in the literature on the effect. Several scholars have argued that these contradictory results are mostly due to measurement and methodological errors (Mouw, 2000; Houston, 2005; Ihlanfeldt, 2006; Bania, et al., 2008).

This study examines the effect of access to employment opportunities on labor market outcomes, especially unemployment rates and household income in the Chicago Metropolitan Area during 2000-2010. Using micro employment data from ESRI and Shen’s accessibility measures, we calculate job accessibility for groups by race and income at the block group level. In order to deal with the endogeneity problem, we use two time periods of data and fixed-effect models in a spatial lag model (SLM) approach. Findings show that job accessibility plays a significant role in explaining unemployment rate and household income. Particularly, the results reveal that an increase in job accessibility for overall, African-Americans, and low income households reduces unemployment rate and improves household income. These results provide evidence consistent with Kain’s spatial mismatch hypothesis.

References

Within the conventional regression models, there is a potential bias induced by nonrandom placement of rail stations. To correct for this, the study uses Propensity Score Matching (PSM) method which allows us to build counterfactual control groups that are similar in characteristic (i.e. distance to CBD, distance to nearest highway exit, population density, employment density, race, and land-uses/zoning at a census tract level) to treatment groups prior to the treatment (i.e. the placement of rail stations). The impact of rail stations is then measured by the difference between control and treatment groups in terms of retail growth.

The study area includes five jurisdictions in the state of Maryland that contain heavy and light passenger rail stations examined in this study. The main data source for this study is the National Establishment Time-Series (NETS) dataset, derived from Dun & Bradstreet (D&B) records. For each industrial category, this dataset includes information on NAICS industry code, firm location, firm size, and dates of firm birth and death between year 1992 and 2009. The 3-digit NAICS code is used for the retail trade industry, which extends the analysis to 12 types of retail activities. Data from American Community Survey (ACS) are also used for the socio-demographic variables.

Results
After accounting for the spatial and socio-demographics variables, some of the expected results of this study are: 1) areas within a half-mile buffer from passenger rail stations experience higher growth in retail activities, compared to areas with similar characteristics but without the presence of a rail station; 2) some retail activities, such as food and beverage stores, are more likely to experience growth by the presence of a passenger rail station than other retail trade sectors, such as motor vehicle and parts dealers.

Policy and Research Implications
From a social stand point, the presence of diverse retail services in a neighborhood is found to bring about important quality of life implications for residents. From a transportation stand point, the presence or absence of neighborhood retail services is a good predictor of mode choice. Cervero and Duncan (2006) found that the residents of mixed-use neighborhoods with better access to retail employment have lower daily vehicle mile traveled (VMT). Therefore, this study will provide valuable information about the extent to which passenger rail investments improve the quantity and diversity of retail services. The results will be relevant to transportation planners and elected officials who are interested in using transit stations as a vehicle for economic development.

References
Logistics clusters result from many elements that can promote agglomeration, including a series of ‘cluster-type’ interactions among firms that are thought to increase the firms’ efficiency and competitiveness (van den Heuvel et al. 2014). Past research in logistics clusters has examined the activities that clusters allow through surveys or interviews (van den Heuvel et al. 2014), or studied clusters as a function of their physical agglomeration (Rivera et al. 2014). Each of these approaches is important, but neither alone accounts for the interrelationships among elements sustaining logistics clusters. Therefore, this research attempts to join the literature’s divergent directions. It examines the topic of competitiveness by asking if logistics employment grows faster in counties with logistics clusters than in other counties. Higher growth rates are a manifestation of competitiveness when variables encouraging agglomeration are controlled for. If higher growth rates are observed, the research will assess the extent to which growth rates are a function of endogenous and exogenous variables.

This research uses a path analysis technique applied to counties in the lower 48 U.S. states to identify the interrelationships among variables that contribute to clustering. First, logistics clusters are identified using measures of establishment and employment concentration derived from Rivera et al. (2014). The path analysis is structured to determine how the rates of county-level logistics employment growth change as a function of logistics agglomeration, centrality, accessibility, and measurable externalities such as congestion. The data sources include employment and establishment data from the U.S. Census Bureau’s County Business Patterns at the county level among others.

The work is relevant for both planning research and practice. Clusters and agglomeration have a strong foundation in regional development theory, which anchors many of planning’s spatial theories. A large amount of work has sought to identify areas of intensive logistics activity, including at megaregion scales (Dablanc and Ross 2012). Simultaneously, this work advances a line of research that has focused specifically on logistics clusters as places where interaction among firms increase firm competitiveness (van den Heuvel et al. 2014, Rivera et al. 2014). This is also an important time to examine cluster competitiveness. Several states and cities are encouraging logistics cluster formation for economic development through training programs, incentives, and enhancement of transportation infrastructure. This research will provide a foundation upon which to evaluate these policies’ contribution to economic development, controlling for variables that the county or state cannot influence.

References


### Abstract

Pedestrian accessibility is a primary component of just and vital cities. Presence of usable sidewalks is the foundation of pedestrian accessibility, but their walkability depends upon socio-economic and contextual
attributes. The mere presence of a sidewalk may not facilitate its usability or walkability. Environmental justice considerations imply that accessibility and walkability be fairly distributed in order to maximize individual, societal and environmental benefits and to respond to limitations imposed by socio-economic status (SES). This paper draws upon a micro-detailed regional pedestrian dataset to characterize and assess accessibility and walkability in an environmental justice context. The main hypothesis is that SES is negatively correlated with positive local walkability. Planning recommendations for addressing revealed inequities are provided as is methodology useful for similar assessments elsewhere.

Introduction
An important objective of urban planning is to improve community livability. Livability can be considered the sum of all parts that contribute to the community’s quality of life including the built and natural environment, economic well being, social capital and equity, and accessibility to educational, cultural, entertainment, and recreational pursuits. In addition, recent research on walkability has highlighted the importance of built environment and its relationship to facilitating physical activity and health (Frank et al. 2006).

On the built environment side, walkability is an important contributor to health and livability, and foundational to accessibility. At a basic level, walkability can be defined as an area that accommodates and encourages walking. Factors associated with walkability include socio-economic characteristics, short travel distances between origin and destination, transit access, land use mix, residential density, positive streetscape features, and connectivity (Frank et al. 2006, Moudon et al. 2006).

Certain socio-economic characteristics make the ability to walk to and from destinations vital. For example, lower SES may be associated with lower rates of automobile ownership, making the ability to walk to destinations or public transportation key in accomplishing life needs. Age and infirmity can similarly impact availability of automobile transportation, again necessitating the use of pedestrian facilities. An equity expectation would be that neighborhoods with more residents dependent on pedestrian facilities would contain more features supporting walkability (c.f. Arnold 2007).

The latter may not be the case. For example, Neckerman et al. (2009) explored differences between poor and non-poor neighborhoods’ walkability. Controlled, paired comparisons revealed lower activity levels in poor neighborhoods. Neckerman et al. noted that differences between the two environments centered on attractive and safe streetscapes, including the presence of amenities such as street trees.

This paper follows those lines, exploring characteristics of attractive, safe, and suitable streetscapes that contribute to walkability, as well as the equity implications of the distribution of walkable pedestrian infrastructure. Specifically the role of sidewalks and street trees are examined using data from a mid-sized urban community: Spokane, Washington. We test the hypothesis that walkability is inequitably distributed in this community.

Methodology
Similar to Ibes (2015) and Neckerman et al. (2009), this work characterizes both the supply of walkable infrastructure in the study area as well as demand for their equitable use. The former characterization is based upon a detailed GIS inventory of the physical characteristics of pedestrian infrastructure and its surroundings, including street trees and built form. The latter is based upon Census data, and data from the health district. Geo-statistical analysis of the spatial distribution of supply and demand and facilitate a quantitative response to our hypothesis. The results provide a basis for recommendations to redress inequities and a sampling frame for further micro-assessment of walking activity.

References
The use of congestion pricing to reduce car trips into London’s central business district created a great natural experiment. The congestion charge was implemented in 2003 within a context of long-term transit expansion and empowered regional governance. In 2000, London’s government was re-structured to create a new regional transportation authority, Transport for London (TfL), with powers over public transportation and a strategic road network. TfL implemented a number of strategies to increase transit capacity, including reallocating roadspace to create a regional network of dedicated bus lanes, and retiming traffic signals to prioritize buses and pedestrian safety. A key measure was integrating bus and rail services into a seamless regional system. In the short term, a congestion charge influences travel decisions, but over the longer term, it may have secondary impacts influencing car ownership and location choices, especially if paired with improved transit and pedestrian access, as in London. (Whitehead 2005) London offers empirical evidence to inform the debate over whether congestion charging will have a dispersing or concentrating effect, and which types of firms and households are most sensitive (Anas & Xu 1999, Eliasson & Mattson 2001, Safirova, Houde et al. 2006).

This paper considers the congestion charge as part of a package of measures that has resulted in regional scale travel and land use impacts. Car use and vehicle miles travelled (VMT) has declined throughout London, in spite of steady employment and population growth. From 2001-2011, traffic remained 15% lower than previous levels in the charged zone, there was zero traffic growth in Inner London, and less than 5% traffic growth in Outer London. (Mayor of London, 2011) This is partly due to the congestion charge increasing from 5 to 11.50 (19.00) over ten years, but mainly to long-term adjustments to a rapidly improving public transport accessibility. By 2012, the index of public transport use had risen to 133.6 from the base year 2000, while the index of private transport use fell to 80.7. (Mayor of London, 2014) London’s CO2 emissions from the transport sector were reduced to 15% below 1990 levels by 2010, largely through reduced VMT and regional-scale mode shift. (Mayor of London, 2011)

The question of how and why travel and location trends have changed over a twenty-year timeframe was approached through a combination of expert interviews and longitudinal data analysis. Over forty interviews were conducted with transportation experts, advocacy and business groups, and developers during a year of fieldwork in London. Long-term trends were constructed from time-series data drawn from a wide range of sources, including the Census, household travel surveys, traffic counts, transit ridership, home sales and commercial rents. Several major secondary trends were identified: reduced car ownership in Central and Inner London, increased concentration of employment in Central London, and increased concentration of firms and households in Inner London.

An unexpected finding from interviews was the deliberate reduction of traffic capacity inside the charged zone, by an estimated 30%, in order to slow travel speeds. An immediate impact of the charge was to increase travel speeds. As TfL reconfigured roadspace and signals to prioritize buses and pedestrians, travel speeds slowed back...
to pre-congestion charging levels. In this way, the traffic reduction achieved by pricing allowed for a ‘capacity grab’ through changes to the infrastructure that locked in lower traffic volumes and slower speeds.

Findings from an investigation of firm location patterns was using business microdata will also be presented. A panel of 120,000 firms was created and location choices were tracked from 1997 to 2012, revealing evidence that larger firms prefer locating inside the charged area at a greater rate than they did prior to charging. This is likely due to the major improvements in transit access to the charged area.

As one of the first long-term empirical studies of congestion charging, this study makes an important contribution to the literature.

References
between two neighborhoods with different characteristics, each with its own perceived advantages and disadvantages, thus modeling real-life decision-making processes more closely (Levine & Frank 2007).

We find evidence of strong preferences for transit-accessible and pedestrian- and bicycle-friendly environments across all income levels. Further investigations suggest that attitudes toward land use and transportation play a strong role in mediating residential preferences. In evaluating differences between low-income and more affluent households, we find the former to hold stronger preferences for transit-accessible environments. However, a comparison of the socio-economic characteristics of station area residents and those living outside of station areas suggests that low-income households are not realizing these preferences to the same extent as higher-income groups. Substantially fewer households making less than $25,000 current live in station areas, while a disproportionately higher proportion of households making between $75,000 and $150,000 live in station areas. Furthermore, a comparison of the characteristics of residents who moved to station areas after light rail as compared to those who moved to station areas before reveals that fewer low-income and carless households (and more high-income households with multiple vehicles) are recent in-movers to station areas. These findings are consistent with recent research demonstrating increased housing costs in neighborhoods with transit access (Bartholomew & Ewing 2011). Given that these trends are likely to exacerbate, it may become increasingly difficult for low-income households to realize their preferences for transit-accessible and pedestrian-friendly neighborhoods without an increase in the supply of affordable housing near stations. Our findings provide vital insights for planners and policymakers as they work to leverage the benefits of rail transit among all residents, and disadvantaged populations in particular.

References

Abstract Index #: 813
**DISTANCE VARIATION, BUILT AND NATURAL ENVIRONMENTAL CORRELATES OF ACTIVE TRAVEL TO SCHOOL**

**Abstract System ID#: 1063**

**Individual Paper**

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Walking or bicycling to school has been considered a healthy travel mode for children as it helps increase daily physical activity [1] and potentially reduce obesity among school-aged children [2]. However, the prevalence of children engaging in active travel to school (ATS) in U.S. has dramatically decreased [3], while the rate of child obesity has increased [4] during the past few decades. In order to promote ATS, studies on environmental correlates of ATS offer some important insights related to community-level intervention strategies that can facilitate population-level behavior changes that are also more sustainable.

Among the environmental factors, the long home-to-school distance has been reported as the significant barrier to ATS [5]. However, few studies examined whether the roles of distance differ depending on certain distance thresholds. Further, past studies have focused on the “built” elements of the environment, such as land use, density, street connectivity, sidewalk/bike lane availability, and traffic/crime conditions. The associations between “natural” environmental factors and children’s ATS have not been sufficiently examined.
Given the noted limitations in previous studies on environmental correlates of ATS, this study focuses on the following two research questions:

1. Do the relationships between distance and the odds of ATS vary across different distance ranges/thresholds (≤800m, 800.1 to ≤1600m, 1600.1 to ≤2400m, and >2400m)?

2. What specific built and natural environmental factors are associated with children’s ATS?

This cross-sectional study was carried out in Austin Independent School District (AISD) in Austin, Texas. A total of 3,314 parental surveys were collected in 2010 from 20 schools out of the 81 schools in AISD and their home locations were geocoded. This study only used those who lived within 10 miles from school. The survey collected the data on school travel mode, student gender, grade, free or reduced lunch program qualification (a proxy for household income level), car ownership, and language mostly used at home. Whether a child walks or bicycles to or from school was the main outcome (dichotomous variable), and the other personal factors were used as confounders. Built and natural environmental characteristics were measured by Geographic Information System and Environment for Visualizing Images within 100 feet of home-to-school route buffer. Mixed-effects spline regression model was used for the statistical analyses.

Results showed significant variations in the associations between the distance to school and ATS across different distance ranges. The odds of ATS were 0.705 (p<0.001) at the ≤800-meter range, 0.797 (p<0.001) at 800.1 to ≤1600-meter range, 0.916 (p=0.002) at 800.1 to ≤1600-meter range, and 1.006 (p=0.222) at >2400-meter range. This suggested that the distance to school had a stronger negative association with ATS at shorter distance ranges, while its relationship was not significant beyond 2,400 meters (1.5 miles). Built environmental correlates of ATS included more bike lanes (OR=1.32, p=0.016), presence of intersected highways (OR=0.50, p=0.001), higher number of crashes (OR=0.94, p=0.001), and presence of sex offenders (OR=1.38, p=0.044). Natural environmental correlates of ATS included presence of park (OR=1.43, p=0.012), steep slope over 8.33% (OR=0.98, p=0.003), and normalized difference vegetation index (OR=1.02, p=0.040).

Findings from this study suggest that the probability of ATS decreases with increased distance to school, and the magnitude of distance-ATS relationship decreases dramatically after 1,600 meters (1 mile) and no significant relationship is found beyond 2,400 meters (1.5 miles). This finding indicates the need for different intervention strategies to promote ATS across different distance ranges and also for reducing the school bus service eligibility from the current 2+ miles to 1-1.5 miles. Further, this study also confirms the previously documented role of safety and reveals new findings related to the potential importance of parks and greeneries in promoting ATS.

References

After World War II, in 1945, economic opportunities boosted urban populations and substantial movement of diverse socio-economic groups had occurred in the United States. Cities started to be packed with residents and city traffic was overwhelmed with limited road infrastructure. Traffic engineers in that time proposed a radical (and a radically expensive) solution: building new networks of high-speed, multi-lane highways connecting downtown with residential areas (Eliot 1922). Ultimately, the Interstate Highway Act of 1956 and the Federal Highway Trust Fund strengthened this solution.

In most cities, the freeways were routinely routed through non-white neighborhoods (Alan 1965) and the massive scale of highway structures fragmented neighborhood boundaries. Cities like Miami and Atlanta forced former residents to relocate and exacerbated the geographical segregation between African American and white neighborhoods (Chudacoff 2005). In Seattle, during the 1960s, similar patterns were happening: Interstate-5 Freeway (I-5) significantly bisected Chinatown/ International District (CID) and forced residents and enterprises to relocate. Prior to the I-5 construction, Seattle’s CID was a unique pan-Asian immigrant community comprised of Chinatown, Japan Town (known as Nihonmachi), Little Manila, and other immigrant communities. The highway construction neglected CID, and the City demolished buildings, and eliminated businesses and homes, which further contributed to the overall deterioration of the area. In 1965, eventually, the I-5 construction began and several years later, the Kingdome, a covered stadium at the south of downtown, was constructed (Gargiulo 1988). Moreover, the elevated multi-lane highway structure physically divided the Asian American communities and destroyed existing settlement patterns. Therefore, the level of social relationship between Asian immigrants also been affected by the highway construction.

The objective of this research is two-fold: (1) to examine the impact of I-5 construction on built environment of CID; and (2) to examine how the impacted built environment influenced social interaction among Asian immigrants. In order to find the missing pieces, this paper analyzed Sanborn Fire Insurance map, historical aerial photo, planning documents, articles, and newspapers. The mapping analysis shows that the highway development forced current business entrepreneurs, who were mostly Chinese Americans, to demolish (or partially remodel) their properties. Moreover, the Kingdome construction and other planning projects in the following years restricted the expansion of CID neighborhood and exacerbated the economic downturn of the area during the 1970s. With regards to the impact on social environments, the settlement pattern of Japanese, Chinese, and Filipinos residents were more segregated after the I-5 construction compared to the earlier years. Further research on community networks and related-facilities, such as family associations (e.g., Tongs), could provide better sense of measuring the effort of preserving the cultural identity of each race in CID.

The Chinatown/International District of today is a combination of the unique and old pan-Asian settlements of the past. Future highway constructions and adjacent developments should respect the identity of CID to preserve the historical environment of unique Seattle’s pan-Asian neighborhood.

References
Recent research shows that Millennials—those who came of age in the new millennium—differ in many ways from the youth who came before them. The Millennial Generation is more culturally and ethnically diverse, urban, educated, and liberal; they are more likely to embrace multiple modes of self-expression; and, having entered the work force during and following the Great Recession, they are more likely to have experienced unemployment, underemployment, and their long-term consequences (Pew Research Center, 2010). Studies also suggest that Millennials are increasingly disdainful of suburban, auto-oriented lifestyles and are moving—in growing numbers—to urban environments that lower their environmental footprints. Sixty-two percent of Millennials prefer to live in mixed-used urban communities close to numerous and diverse activities—shopping, restaurants, employment, and 40 percent plan to live in urban neighborhoods (Belden Russonello Strategists LLC, 2013). Indeed some recent research suggests that many, though not all, of the nation’s largest and most culturally vibrant cities U.S. metropolitan areas are attracting disproportionate shares of young, college educated adults (Cortright, 2011).

Against this backdrop, we draw on data from the 2000 and 2010 U.S. Census to examine the recent residential location patterns of Millennials vis-à-vis other working-age adults. To comprehensively characterize residential location, we develop a typology of neighborhood types utilizing the Environmental Protection Agency’s Smart Location Database and data from the U.S. Census. Using factor and then cluster analysis, we categorize each census tract in the United States (over 70,000 in all) into mutually exclusive neighborhood types. We then use our two time periods (2000 and 2010) to examine lifecycle effects through a pseudo-cohort analysis. As young adults age (in this case, over a 10-year period), do we see evidence in a shift in residential locations toward or away from more urban, walkable, and transit-rich neighborhoods?

The findings from this study have obvious implications for the future of cities and suburbs generally, and the revitalization of central cities in particular. More specifically, such trends may support the efforts by transportation planners to encourage travel by less environmentally invasive modes like walking, biking, and public transit. Such non-auto modes function best in dense urban neighborhood where origins and destinations are proximate, and private vehicles function less effectively. Thus youth who move to and stay in urban neighborhoods may be more likely than previous generations to adopt and maintain less auto-dependent lifestyles.

References

Pedestrian fatal crashes on the Interstate System account for more than 10 percent of total pedestrian crashes in the U.S. over the five-year period of 2008 through 2012. This number is highly alarming, considering the fact that the Interstate System only accounts for 1 percent of the total public road mileage in the U.S. and pedestrians are not expected on the Interstate System. There are a few pieces of literature that have made efforts in improving this situation. However, these studies do not consider the effect of the built environment or the co-dependence of different geographical levels of built environment features on pedestrian crashes on interstate highways. This study employs a hierarchical spatial autoregressive model (HSAR) to accommodate the geographically hierarchical data structure of crash incidents. This study will utilize the principal component analysis to create sprawl index from five underlying land use characteristics, which represents the regional level in the model. Using GIS software package, the author assesses the urban form of the community, which represents the neighborhood level in the model, as well as on-site safety countermeasures, which represent the micro-scale environment in the model. Using the HSAR model will allow the author to estimate the co-dependence of different built environment features at these three geographical levels contributing to pedestrian crashes and their magnitudes. The findings suggest land use, urban form and engineering countermeasures on site all contribute to the pedestrian fatal crashes on Interstate Highways. The co-dependence among the factors at three different geographical levels suggests planning cooperation among planning departments at State level, regional level and municipal level. And it also provide evidence for splitting the funding for transportation safety based on the magnitudes.

References
In this study I particularly focus on public transit system accessibility. Public transit serves in part the role of addressing mobility inequities in many urban areas. Low income persons or households without vehicles, persons who can not operate personal vehicles due to disability or other reasons, are often reliant on transit systems for their daily travel needs. Beyond the availability of transit service in close proximity to those that experience these challenges (e.g. whether a neighborhood is served by a bus), an important metric of how successfully transit systems are meeting the goal of equitable access is to evaluate where these systems can take users within reasonable time. In this paper I evaluate transit accessibility in the Chicago region to a set of activities including to work, groceries and park spaces and assess the level of connectivity the transit system provides different groups of residents. The study assesses how transit access is distributed across space in different parts of the metropolitan area, and across different income, socio demographic groups (age, race, education level) and by disability status. The study will also use a variety of access measures within those reported above particularly for employment access. Access to low/medium/and high wage jobs will be assessed separately as will classes of jobs based on industrial classification. This is done to recognize that not all opportunities may be of value to different groups based on skill levels. Data for the study comes from recent efforts by the author to map accessibility in the Chicago region (urbanaccessibility.com) and publicly available census data, which will provide the socio demographic dimension. The goal is to evaluate the distribution of transit access as it exists and to assess whether redistribution through changes to the transit system or through land use changes is in order to address existing gaps. Implications of the findings will also be discussed.

References


Abstract Index #: 818
SAFETY IN NUMBERS FOR PEDESTRIANS AND CYCLISTS? NEW EVIDENCE FROM CALIFORNIA
Abstract System ID#: 1113
Individual Paper

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First proposed by Jacobsen in 2003, the “safety in numbers” hypothesis suggests that walking and bicycling become safer as larger numbers of people walk and bike. Jacobsen’s original article has been cited more than 500 times in the scholarly literature, with countless additional citations in the popular press and the blogosphere. The implication of this result is extremely attractive — and dangerous: if we just get more pedestrians and cyclists on the streets, the streets will become safer for pedestrians and cyclists!

This study uses new, census tract-level estimates of bicycling and walking activity from California together with 10 years of tract-level crash data to conduct an in-depth exploration of the safety in numbers hypothesis. I estimate the relationship between walking/cycling activity and walking/cycling crashes at multiple levels of geographic aggregation — census tract, city, county, and metropolitan region — and for different crash severity levels, and discuss differences in the findings. I explore differences in these relationships by neighborhood typology (i.e. central city, urban, suburb, rural), as well as look at walking/cycling activity normalized by roadway length to get an indicator of the density of pedestrians and cyclists rather than simply the number of pedestrians and cyclists on the roads.
Preliminary results highlight three points. First, the level of geographic aggregation is critical to the safety in numbers result. Interestingly, the iconic relationship appears stronger at finer geographic resolution. Second, the relationship between crash rates and density of pedestrians and cyclists is different from the relationship between crash rates and numbers of pedestrians and cyclists. Third, specification of crash severity is important. Crashes that result in severe injury or death have a different relationship with pedestrian and cyclist activity levels than crashes that result in minor injury.

Understanding the nuances of these relationships will allow planners and decision makers to better assess under what conditions the "safety in numbers" hypothesis might - or might not - be relevant.

References
interested in the assessment of the impacts of regional transportation plans consisting of a number of capital investments given the likely impact of these plans on access levels across population groups. We find that existing guidelines provide little explicit guidance regarding the assessment of the distribution of benefits generated by such transportation investment plans. Based on different interpretations of Title VI, however, we distinguish four possible normative standards: (1) only explicitly discriminatory actions are problematic, (2) a Pareto-type interpretation where some non-zero benefits should be granted to protected communities, (3) benefits reaped by (protected) communities should be proportional to their size, and (4) a restorative approach, in which benefits should be distributed in favor of protected communities to reduce existing inequalities over time. Using these four normative approaches, we analyze the equity analyses carried out by the ten largest metropolitan planning organizations (MPOs) as part of developing a regional transport plan (RTP). Using content analysis to code analyses into different normative types, we assess the way in which access is being defined and the normative standards that are used to assess the fairness of its distribution. Our research uncovers a confusing diversity of analyses and underlying distributional standards. We argue that explicit federal guidance regarding equity standards is a prerequisite for improving the fairness of practice across the board. Transportation planning agencies can lead the way by engaging explicitly with the meaning of equity as part of their ex ante equity assessment process of regional transportation plans.

References


Abstract Index #: 820

TRAFFIC CRASH ANALYSIS OF OLDER DRIVERS: FOCUS ON THE EFFECT OF URBAN FORM CHARACTERISTICS

Abstract System ID#: 1134

Individual Paper

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The right of living a healthy life and plan a city to deliver that right is one of the urban planning goals. Many planners around the world are making significant efforts to lessen threats to people’s mental, social, and physical health. One significant measurable threat is the number of unintentional fatalities. Motor vehicle crash is the second leading cause of unintentional death in the United States (Center for Disease Control and prevention, 2013). Vulnerable road users have recently received a special attention in crash analysis literature. In Florida, with the largest percentage of old population statewide (18.7% according to 2013 Census data), older drivers (age 65+) should be considered as the vulnerable users as they have the higher chance of getting seriously injured. This age group is up to four times more susceptible to die in a crash with same intensity compared to a 20 year old driver (Eberhard, 1996).

The dominant pattern of age-related crash analysis is constructed based on the association between young drivers and transportation related factors. It reveals the gap in studies for older drivers' crashes and its relationship to urban form-related factors. Many studies have focused on the effect of speed and vehicle mile travel (VMT) on crashes, with this assumption that specific types of land use and urban form that affect the speed, generate more trips and increase VMT (Ewing & Dumbaugh, 2009). However, few studies have explored the direct and in-depth association between urban form and vehicle crashes.
This research seeks to contribute to filling the current gap by exploring urban form factors contributing to crash frequency and crash severity for older drivers in Florida. Three main questions are examined: first, is there a significant association between crash frequencies/severities and the age of drivers in Florida? Second, how does this association vary within the state? Third, what are the main urban form factors contributing to older driver crashes? To answer the first and third questions, the study applies multiple regression and discrete choice models to explore crash contributing factors and estimate crash probabilities. For the second question, the application of geographic weighted regression explains the spatial differences and the higher priority areas in case of older driver’s safety.

The findings from this study — by determining both the high risk urban form factors and hot spot crash areas involving older drivers — can guide transportation planners to establish effective countermeasures in the process of crash reduction policies.

References


Implicit in the idea of urban planning is that by drawing up and implementing a plan, a community can influence its destiny. To date, however, there is almost no empirical research that examines the causal impacts of plans. Instead, scholars have asked whether plans are implemented (Talen, 1996) or whether development conforms to a plan. Implementation or conformance, however, do not equate to a causal relationship, as plans may be endogenous. For example, a plan that calls for high-rise development in downtown Dallas may simply document preferences that would have been realized regardless of the plan.

In this paper, I use the case of transit-oriented development (TOD) plans to provide quantitative estimates of the impact of TOD planning on urban development. I focus on one plan in San Francisco (the Market/Octavia Plan), and eight plans in Seattle completed under the City’s Station Area Planning program.

TOD plans have two characteristics that make them an excellent case study. First, they address physical changes to the built environment such as densities and parking ratios, which can be readily quantified. One might also expect plans that focus on physical development rather than policy changes to have a greater causal role, as they may provide a coordination mechanism for developers and local government (Hopkins, 2001).

Second, the boundaries of TOD plans (at least in San Francisco and Seattle) are arbitrary, extending 1/4 or 1/2 mile from rail transit rather than following physical or socio-economic boundaries. Certainly, transit mode share declines with distance from transit, but there is nothing magical about the 1/4- and 1/2-mile thresholds (Guerra et al. 2012). This arbitrary spatial extent allows me to use a regression discontinuity design to compare parcels and developments immediately inside and immediately outside the plan area, on the assumption that the distinguishing feature is the existence of the plan. In other words, I assume that the TOD plan accounts for any
differences between nearby parcels on either side of the plan boundary, after controlling for distance to transit. Such regression discontinuity designs are well established in the causal inference literature in disciplines such as economics and political science, and increasingly in planning as well.

Seattle and San Francisco have a long history of TOD planning, giving time for any impacts of a plan to be felt. Seattle’s program was completed in 2001. San Francisco’s Market/Octavia Plan was adopted in 2008. Data availability is a further consideration. I have already obtained parcel-level development data and GIS files, and I have cleaned and joined the San Francisco data.

I will quantitatively assess the impacts of TOD plans on several outcome variables: (i) the probability of redevelopment occurring on a given parcel; and (ii) development characteristics that TOD plans seek to influence, e.g. density and parking ratios. Additional control variables, such as development data and the ratio of land value to improvements value, are straightforward to compute from the parcel data.

The primary focus in this paper is the quantitative analysis. However, I expect the results to inform future qualitative study, through interviews with planners, developers, residents and others involved in the planning process. Such a qualitative follow-up would enable me to explore the motivations and processes underlying the quantitative results.

The findings will be of interest to scholars and practitioners in the fields of TOD and station-area planning. Understanding the extent to which TOD planning leads to more and/or denser housing will help to assess the cost-effectiveness of such a strategy in building transit ridership. For example, an MPO or transit agency might consider giving planning grants to local jurisdictions, as exemplified in the San Francisco Bay Area. This paper will also contribute to broader questions of planning theory, helping to move the debate beyond whether plans are implemented and towards an understanding of their causal impact on policy and development.

References

of social disparity. The main objective of this study is to develop a set of measures and indices that assist in evaluating and studying transportation inequality with an application in Los Angeles County.

Transportation inequality is a concept with many components. It can refer to the unfair distribution of costs and benefits of transportation systems including but not limited to governmental subsidies in favor of private vehicles versus transit; unfair burden of transportation projects on low income and minority communities through the disparate distribution of traffic externalities; and, unequal participation of communities in decision making processes, among others. Unequal access is also an important part of the inequality problem mainly because it can exacerbate social exclusion. Transport related social exclusion is defined as the process by which people are prevented from participating in the economic, political and social life of the community because of reduced accessibility to opportunities, services and social networks. In the United States, concerns about providing equal access to social and economic opportunities has mostly centered on the issue of access to employment, health care, and food (Hansen, 1959; Blumenberg & Ong, 2001; Guagliardo et al., 2004; Walker et al., 2010). The main gap in the existing literature, however, is the lack of multidimensional indicators of accessibility from a social exclusion point of view and indices to measure unequal distribution of these indicators across communities. This is the focus of this paper.

This paper is organized in 2 sections. The first section is dedicated to developing a set of indices of transportation inequality. Statistical correlation studies and GIS tools are utilized in this step to develop alternative composite indices to measure access and how it is distributed across different population groups. The second section tests developed indices in evaluating policies. To do so the County of Los Angeles is selected as a case study before and after implementation of Measure R projects. Measure R is a half-cent sales tax for Los Angeles County to finance new transportation projects and programs, and accelerate those already in the pipeline. Primary sources of data utilized in this study include Bureau of the Census, American FactFinder, Census TIGER files, Census Transportation Planning Package, Longitudinal Employer-Household Dynamics, OpenStreetMap, California Household Travel Survey, Metro’s Official Blog of Transit Data and Technology, SCAG GIS library, and GoogleTransitDataFeed.

I expect to have a set of inequality indices at the end of this research that can expose strengths and weaknesses of a policy such as Measure R in alleviating transportation inequality and social exclusion. These multidimensional indices can highlight which areas of the county do not have sufficient access or which services are not accessible enough yet. This will help planners and policy makers to recognize areas in need of further attention and guide funding priorities.

References
The vision of sustainable development can become a reality only if all citizens are given access to options that enable them to conduct their activities in a way that are sustainable. Often, we are aware of how our lifestyles produce undesirable consequences and would like to change that, but are unable to because of lack of alternatives that can support our activities without associated negative externalities. This is especially true in the case of our travel habits and decisions. Most of us are aware of the ills of using the private automobile as a dominant mode, and may need just a little encouragement to change our mode of everyday travel. Transit, some may say, is a worthy opponent of the car, with similar benefits, but with a smaller ecological footprint and suitability for a newer generation who would rather use their smartphones and devices than drive. As promising as transit sounds, especially given its success with increasing ridership trends and investments in multitude of modes (APTA Factbook 2014), a huge number of cities in the U.S. do not have transit services available to its citizens.

This paper directs attention to one such city that fits into the description of a non-traditional transit market, the city of Westfield, MA, lacking the necessary physical and geographic contexts such as densities and compact forms deemed essential for successful transit operations. Westfield, MA, has a population of only 41,094 (U.S Census 2010). However, since it is home to a university campus and boasts of scenic landscapes and the Westfield River that could be potential tourist destinations in the future, and hence there might be some latent transit demand. In addition, its proximity to transit friendly city of Boston and bustling Worcester makes it a case worth discussing in terms of transit. Given that some research exemplify successful transit trends and foresee such performances in similar communities elsewhere (Thompson et al 2006, Mees 2010), this study examines if there is scope for broadening citizen travel choices here or give up the impossible task of inducing public transit. This paper highlights the lessons from an exhaustive literate review that explores the external and internal factors that affect transit and identifies factors contributing to successful transit systems. Using Westfield as an example, the paper will then present a detailed review of the city, including socio-demographics and geospatial analysis (GIS), illustrating how the lessons learned from successful transit systems/cities can be used to carve out possible transit strategies for meeting mobility challenges of citizens of Westfield and such non-traditional transit markets.

References

Abstract Index #: 824
THE TRANSIT EQUITY IN RICHMOND, VIRGINIA: AN ASSESSMENT
Abstract System ID#: 1190
Individual Paper

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Transit equity is a critically important but very complicated issue, which can be examined on multiple dimensions and in different ways. Even though there exists a trade-off between transit efficiency and transit equity from a purely economic perspective, transit equity itself has a civil and human rights priority that can never be neglected.

This fact certainly holds true for Richmond, Virginia. Richmond is a relatively poor city with a lower median household income and a higher concentration of African American population, many of whom are transit captives. The Greater Richmond Transit Company (GRTC), which is the sole local transit operator primarily providing bus services, is facing huge challenges to meeting an ever-rising transit demand throughout the region.
This paper will assess the following transit equity-related issues in Richmond, Virginia:

First, transit accessibility to employment issue. Transit accessibility, employment, and poverty are inherently connected. Many low-income residents heavily rely on transit to access their job locations. However, due to low population density and fiscal consideration, most of GRTC’s transit services are primarily concentrated within the boundary of Richmond city, even though jobs have been suburbanized. Inability to access employment has worsened the urban poverty situation.

Second, population aging and paratransit service issue. Richmond has entered the aging society, just like the rest of nation. Many senior citizens cannot drive and quite a few of them even cannot take fixed route buses. Pursuant to the Americans with Disabilities Act of 1990, GRTC is obligated to provide extremely expensive paratransit services to these people. However, GRTC is fiscally distressed to do that. Therefore, many innovative financing and planning strategies need to be figured out in order to meet this challenge.

Third, Title VI compliance issue. Even though GRTC periodically prepares its transit system Title VI program and monitors its progress, the existing evaluation system and performance indicators still leave some loopholes. This paper will focus on examining its service and fare equity issues, while other relevant issues may also be touched.

Based on this empirical study, the paper will draw conclusions and make recommendations.

References


Abstract Index #: 825
PROSPECTIVE ACCESSIBILITY EVALUATION AT THE PROJECT LEVEL
Abstract System ID#: 1200
Individual Paper

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Accessibility metrics in current use are, for the most part, either snapshots of people’s ability to reach destinations today, or of that ability under future regional development scenarios. These metrics are strong in evaluative comparison of geographic, demographic, or modal accessibility distributions within or between regions. But for accessibility-based evaluation to displace its mobility counterpart in land-use and transportation planning, accessibility tools need to be 1) forward looking; and 2) deployed at the level of the individual project or regulatory decision. For example, where a transportation investment is currently evaluated by its potential impact on highway level of service, the planner would need to forecast its accessibility impact. A similar move would need to occur with land-use regulatory decisions: where a development proposal is currently evaluated in
part by traffic-impact analysis—a strictly mobility-based framework—the planner would need to evaluate land-use proposals for their future impact on accessibility.

A move from whole-region metrics to forward-looking project-based metrics involves unsolved methodological challenges. Consider, for example, a new housing development in a close-in area of a metropolitan region. It might degrade the accessibility of some existing residents by exacerbating congestion without contributing compensating non-residential destinations. Accessibility of the neighborhood’s future residents would presumably be a compensating factor, but the basis of comparison for this benefit is not obvious. Neither the current residential locations of these future residents nor their hypothetical alternative residential locations (should the neighborhood not develop) are known. This paper argues that this problem can be solved with an accessibility elasticity metric: the ratio of percent change in regional accessibility to percent change in population (in the case of residential development), indicators of destination value (in the case of nonresidential), or infrastructure metrics (in the case of transportation investment). Properties of this framework are explored and implications analyzed through development of a framework for prospective project-level accessibility evaluation and demonstration of the accessibility elasticity metric over a range of cases.

References
Results: Preliminary analyses show that ratios of AADTT to PUD vary greatly across trail segments. However, mapping and statistical analyses show correlation between the trail segment AADTTs and PUDs. Both measures are highest on trail segments near water bodies in parks. Other factors associated with variation include neighborhood sociodemographic characteristics.

Implications for Planning: Social media may be useful in gauging demand for trails and other public facilities, but challenges in application remain. As a general indicator of intensity of use, PUDs provide insight into spatial patterns of use of large networks. Where detailed information is needed for purposes of planning or engineering (e.g., to plan traffic controls), counts remain necessary. A limitation of the use of PUDs as an indicator of demand for facilities is that populations uploading images to Flickr are not likely to be representative of the general population. Multiple measures of demand for facilities are needed to ensure interests of all users are addressed.

References


Abstract Index #: 827

CAUSAL FACTORS SHAPING POLICY INTERVENTION BASED ON THE RELATIONSHIP BETWEEN THE MARKET AND STATE THROUGH UBER

Abstract System ID#: 1208

Individual Paper

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This study examines how different municipal governments regulate the informal economy (sharing economy) and what is the purpose of regulation, and what factors influence these regulatory outcomes. Uber, which is one of the most well-known cases of informal and sharing economy, has been the focus of conflicts over regulation around the world. The relationship between the informal economy and the state is one of inevitable conflict (Centeno and Portes, 2006). As an example of informal economy, Uber works to avoid or to subvert state authority. According to Centeno and Portes, the regulatory intent and the regulatory capacity formulate state regulatory policies that target emerging entrepreneurs in the territory of informality. However, when I investigate current discourse and regulation of Uber, this framework does not apply to the relationship between Uber and the state. The state’s regulatory role of risk management is not politically or socially neutral (Cross and Pena, 2006). The recent regulatory framework of the state’s approach to Uber is related more to an existing relationship between the state and the local taxi industry, and the unique characteristics of the taxi market.

The taxi industry is one of the few industries which are still regulated by the government, and have not been opened up to the market as the primary mechanism of regulating services and prices (Teal and Berglund, 1987; Schaller, 2007). Furthermore, the taxi as a transportation mode must now compete with subway and bus public transit modes, but at the same time functions as a supplement to public transportation services. Therefore, the relationship between the taxi and the local government has been defined by the taxi industry’s strong connection with the public sector. This is a factor that has prevented taxi industry from being privatized or opened up to market regulation.
This research uses three cases: the taxi market in Chicago, Tokyo, and Seoul, and recent municipal regulations and actions against Uber in those places, as a comparative case study. The governments of these three cities have been controlling the controlled existing taxi industry through the driver’s permit system. However, their regulatory framework and methods are now moving toward a different direction, with different initial outcomes. Limited empirical data has been generated so far in this new research area, so I use existing literature and journalistic content to fill this gap.

This paper has three aims. First, I will conceptualize the general local taxi industry in terms of its role, function, and regulatory system. Second, this paper examines each municipal government regulatory policy against Uber to understand how they are regulating this emerging economic activity. Lastly, I explore how this governmental regulation has been formed by the relationship between local governments and the current local taxi industry. This study suggests that the institutional nexus around the formal industry can affect the extent and methods of regulating new informal economic actors, which may be compete with the existing formal industry. With a globalized informal economy of multiple simultaneous phenomena, the regulatory framework and direction of global cities (like New York, Chicago, Tokyo, Seoul, France, London, and so on) can be easily replicable in other cities around the world, as is the case with Uber. Therefore, this research will contribute to global urban policy by identifying the causal factors that shape policy interventions, and how they are decided based on the relationship between the market and state. This research does not examine other potential factors in policy implementation of local governments, such as economic condition and scale, urban form, population density, and so, this socio-economic condition of cities will be investigated for the future research.

References

Abstract Index #: 828
THE EFFECTS OF FEDERAL POLICY ON REGIONAL FREIGHT PLANNING
Abstract System ID#: 1222
Individual Paper

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The Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991 ostensibly began a new era of federal transportation policy in the United States, emphasizing multimodal planning and bringing greater balance between regional metropolitan planning organizations (MPOs) and state departments of transportation (state DOTs). Freight was one area within transportation to receive greater emphasis in ISTEA and subsequent federal legislation. Despite initial enthusiasm, more than two decades after the passage of the watershed law, in many ways the ISTEA revolution remains unrealized. This study assesses the effects of ISTEA-era federal policy on the freight planning capacity of MPOs with a particular focus on the widely-lauded policy to assign higher levels of authority and responsibility to MPOs representing regions with populations greater than 200,000. To model the effects of federal policy on regional freight planning, an index of MPO freight planning capacity was created using data gained from a national survey of MPOs and was then combined with data from secondary sources. Findings from regression discontinuity models show no effect of the policy of assigning higher levels of authority to large MPOs on the capacity of MPOs to conduct freight planning. Additional models also show minimal effect of other federal policies including air quality conformance and consideration of environmental justice impacts. As freight transportation receives increasing attention from urban planning professionals and researchers, findings from this study help inform ongoing debates about the uncertain future of federal transportation policy.
DIFFERENT WAYS TO GET TO THE SAME PLACES: FINANCIAL INEQUALITY OF COMMUTING AMONG INCOME GROUPS

Abstract Index #: 829
DIFFERENT WAYS TO GET TO THE SAME PLACES: FINANCIAL INEQUALITY OF COMMUTING AMONG INCOME GROUPS

Abstract System ID#: 1225

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Our understanding of low-income persons’ travel behavior is limited, and thus transportation planning and policies often fail to effectively address their travel needs. Such failure limits low-income persons’ access to various opportunities and further enlarges socioeconomic gaps. This research investigates how financial constraints affect different income groups’ commuting trips. I hypothesize that lower-income workers’ commuting time and travel mode are more sensitive to changes in monetary costs than higher-income workers. As the hypothesis is explored, I will identify a variety of factors that may have different influences on commuting, including cost of gas, parking, toll, transit fare and passes.

The study area is the eight-county Chicago metropolitan area. It has a strong central city, the city of Chicago, with about 32 percent of the total jobs. Workers at different income levels commute to the same employment centers, allowing me to examine differences in commuting behavior of the workers who share the same workplace locations. Individual socioeconomic and travel data come from the Chicago Regional Household Travel Inventory (CRHTI). CRHTI data also provide information of the census tracts where each worker’s home and workplace are located. To understand the economic and demographic characteristics of each traveler’s housing and workplace locations, I collect census tract level data from the 2006-2010 5-year U.S. Census American Community Survey (ACS) and Longitudinal Employer-Household Dynamics (LEHD) data. I use multinomial log regression models to estimate the effects of monetary costs on different income groups’ commuting mode and log-linear Ordinary Least Squares (OLS) regression models on commuting time, controlling socioeconomic and neighborhood variables.

Results of this research will identify specific financial constraints of commuting faced by low-income workers, and can suggest policy instruments to relieve these constraints. Potentially viable policy options include giving low-income workers vouchers to reduce the burden of monetary cost or improving efficiency of the transit and bicycle systems to reduce travel time. Results of this research will help us develop a more complete understanding of inequity in transportation systems and propose innovative ways to increase equality.

References

- Hiroyuki Iseki
- Xinyu Cao
- Evelyn Blumenberg
- Genevieve Giuliano
- Yingling Fan
AIRPORT EXPANSION: ASSESSING THE VULNERABILITY OF AIRPORT-ADJACENT COMMUNITIES

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Airports sprouted throughout America nearly a century ago, virtually in tandem with the rise of urban planning. In his 1930 study of airport conditions, Austin McDonald remarked, "In a way, airport planning is simpler than most phases of the planning movement, because it has no hoary traditions gathered about it and no century-old mistakes to be corrected." Modern airports have since emerged from the airfields of the Winged Gospel to become regional transportation hubs fostering economic growth and global connectivity. This research builds on scholarship that evaluates hub airport planning in the 21st century, when 19 primary hub airports planned and deployed a new or extended runway, to investigate what airport planning “traditions” and “mistakes” have emerged over the last century. Specifically, this research investigates environmental justice outcomes for neighborhoods adjacent to America’s 68 primary and secondary hub airports: Did hub airport expansion (post-2000) occur more often, or disproportionately, when the airport-adjacent neighborhoods contained certain demographics or environmental features?

The aviation literature broadly calls out for greater study of environmental impacts of airport expansion. To fill this research gap, we can look to planning literature on urban renewal and environmental racism to better contextualize the impacts of airport expansion on minority groups. Urban renewal research illuminated the pattern of disproportionate impacts on minority communities and created a shift in the culture of highway planning. Similar to highways, federally funded airport infrastructure is subject to the National Environmental Policy Act and other legislation designed to critically examine and prevent disproportionate or significant impacts on the human and natural environment. However, airport infrastructure expansion has yet to undergo the same degree of scrutiny from planning scholars, while airport planning in practice systematically favors case-by-case airport reviews over aggregate narratives of the larger hub network. This project advances aviation and planning research towards a more aggregate and qualitative review of the impacts of airport development on airport-adjacent communities.

This research first contributes a classification of airport communities that describes patterns in their demographics and environmental features. Second, this research statistically tests, using spatial analysis and regression modeling, whether hub airport development in the 21st century occurred disproportionately in communities with certain demographics and environmental features. This research generates new knowledge in the demographic and topographic characteristics of airport-adjacent neighborhoods to better describe the vulnerability of populations and environments surrounding hub airports. In addition, this research offers insight into the effectiveness of the National Environmental Policy Act and other social and environmental laws that inform the airport planning process.

References

INSTITUTIONAL INVESTMENT IN CHINA’S INFRASTRUCTURE

Abstract Index #: 831
Abstract System ID#: 1239
Individual Paper

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Rapid growth in post-reform China has resulted in a high demand for infrastructure and the need for sustained mechanisms of financing. As public finances are already overstretched at the local level, seeking long-term investment financing seems imperative. A potential such source is institutional investors, including pension funds, insurance companies, endowments, and sovereign wealth funds. The higher long-term risk adjusted returns, amongst other benefits, make infrastructure an attractive asset class for institutional investors. But in general, all categories of long-term financing have been affected by the 2008 global financial crisis, including debt flows, bank lending, bonds, and foreign direct investment (World Bank 2013). On the more positive side, a McKinsey report predicts that funds managed by institutional investors will grow significantly, and infrastructure projects have the opportunity to capture more of their capital (MGI 2013).

This paper provides an intellectual foundation for understanding institutional investment in China’s infrastructure. Integrating issue conceptualization with diagnostic analysis, it focuses on economic infrastructure, including transport, energy, telecommunications, water and sewerage, and other utilities. Specifically, it offers an in-depth analysis of the prospects for institutional investment in China, as related to the investment environment, divergent investor groups, and opportunities in various sectors. Drawing from experiences elsewhere, the paper also explores how non-bank financial intermediaries can be developed to harness institutional investment. The paper is informed by interviews with a select group of fund managers and investment professionals based globally and in China.

References

RETAILERS IN AND AROUND LOS ANGELES’ MASS TRANSIT INFRASTRUCTURE

Abstract Index #: 832
Abstract System ID#: 1245
Individual Paper

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With an increased emphasis on sustainability, cities have been developing their mass transit systems with a renewed focus on subway, light rail, and bus rapid transit systems. Ridership increases when high-density mixed-use development occurs around stations. Transit Oriented Development (TOD), usually built in response to announced rail or subway stations, is characterized by this high-density mixed-use residential, office and retail spaces. However, gentrification also occurs along these new lines and stations, with negative effects on the original residents. Rising land values leading to higher rents and property taxes dislocating both residents and local retailers (Kahn, 2007).
The retail aspect of TOD is especially important as it increases foot traffic and makes the area a destination. Retail markets adjust to demand for product types, retail rents, and customer traffic and agglomeration effects. A large transit stop increases customer traffic and increases the probability of a retailers locating in the area (Sevtsuk, 2014). The higher rents may lead to more chain stores. However, many community developers focus on local “mom and pop” stores that cater to neighborhood needs and provide local employment versus corporate and franchise chain stores that may reduce the unique local milieu (Lew, 1989; Harris, 2006). This study evaluates the loss of local stores around Los Angeles transit stations.

This study collected data on the use of retail space within one-half mile of a random sample of the Los Angeles’ transit stations. Data collected includes store name, NAICS classification, a chain indicator, an indicator of new buildings (built after 2005), and the building type. All retail stores are being collected, as well as other uses that fill retail spaces. For example, strip malls typically contain just retail, but can also have uses such as medical and legal offices. Census tract level data incorporates population and socioeconomic status of the station areas.

The analysis compares retail distribution between station types based on socioeconomic and urban/suburban characteristics. Higher income, more suburban, areas have a higher proportion of chain stores. A comparison between the quarter- and half-mile radii demonstrates denser retail development and more chains near the transit stations, with less vacancies and non-retail uses in retail properties. Finally, newer developments will be shown to have more chain development than already existing buildings. This study verifies these hypotheses and helps determine the effect of transit stations on the retail structure of Los Angeles.

References

Abstract Index #: 833
BICYCLE TRAFFIC MODELING WITH GIS AND CTPP (CENSUS TRANSPORTATION PLANNING PRODUCT) DATA

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Since the 1970s energy crisis, bicycle planning has gradually gained momentum in many metropolitan areas. Today, almost every metropolitan planning organization (MPO) has published bicycle master plan to provide guidance and support for promoting safe, easy-to-use and connected bicycle infrastructure. However, unlike well-established vehicular transportation planning, bicycle planning has long suffered from the lack of systematically documented bicycle traffic data. To address this issue, different MPOs seek different solutions. Some used survey to provide supplementary data, some developed methodologies for non-motorized traffic monitoring and counting. However, all these efforts require additional resources from local governments. When the local budget for bicycle infrastructure improvement is already quite stringent, it is usually very difficult to secure additional budge for data acquisition effort.

Census Transportation Planning Product (CTPP) has long been used as an important dataset for transportation planning. It is systematically documented to capture demographic characteristics, home and work locations, and modes of transportation of all the commuters including bicycle commuters. Although CTPP data is freely available, it has been largely overlooked by bicycle planners due to the lack of specific route information and non-
commute travel information. This paper proposes a GIS analytical model to model bicycle traffic by simulating the route that bicycle commuter most likely takes from the origin Transportation Analysis Zone (TAZ) to the destination TAZ.

In this model, route choice of a cyclist is assessed with an integrative index system that combines spatial distance and time distance with safety ratings and ease of use ratings for all the segments of roads, alleyways and other bikeable surfaces. Many environmental factors including road grades, traffic volume, bike related traffic accidents, speed limit, surface condition, bike lane types, etc., are quantitatively modeled. This integrative index is used to replace the travel distance and travel time attributes in a network dataset in GIS, thus to trick the traditional routing algorithm into considering these environmental factors in analyzing the best route between origin and destination. CPTT data feeds the newly built network dataset with thousands of pairs of origins and destinations from census survey to generate most likely routes for all the bicycle commuters. All the output routes are spatially overlaid and summarized to represent the frequency of usage.

With this GIS model, we could turn the untapped CTPP data into a valuable resource for bicycle planners to use in many applications such as improvement project prioritization.

References


Abstract Index #: 834

UNDERSTANDING THE TEMPORAL-SPATIAL PATTERNS OF MOTOR VEHICLE ACCIDENTS

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Using crash data from the state of Hawaii, we examine the location and temporal distribution of alcohol-related crashes, considering both roadway and environmental characteristics as well driver attributes. In addition to having a distinct temporal signature, alcohol-related collisions also exhibit spatial patterns which are a function of both underlying land use and activity generators and the behaviors of drivers. The policy implications for both enforcement as well as other approaches to curbing DUI are considered. The paper considers issues related to data, statistical modeling, spatial and temporal analysis, and the unique yet important contributions of urban and regional planners.

References

UNDERSTANDING THE TEMPORAL-SPATIAL PATTERNS OF MOTOR VEHICLE ACCIDENTS

Abstract System ID#: 1262
Pre-organized Session: Traffic Safety Planning

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Using crash data from the state of Hawaii, we examine the locations and temporal distribution of alcohol-related crashes, considering both roadway and environmental characteristics as well as driver attributes. In addition to having a distinct temporal signature, alcohol-related collisions also exhibit spatial patterns which are a function of both underlying land use and activity generators and the behaviors of drivers. The policy implications for both enforcement as well as other approaches to curbing DUI are considered. The paper considers issues related to data, statistical modeling, spatial and temporal analysis, and the unique yet important contributions of urban and regional planners.

References


ACCESSIBILITY-BASED TRANSPORT PLANNING: HOW TO MAKE IT HAPPEN?

Abstract System ID#: 1264
Individual Paper

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Transport planning usually focuses on provision of transport infrastructures and services with an aim to ease passengers and freight's movement demand. As a result, transport policies are often limited to mobility-based improvements which favour quantity and quality of physical travel over a broader range of socioeconomic and environmental impacts, vehicles over people, and automobile travel over alternative modes. Planners and politicians are often faced a dilemma: while transport improvements may increase transport speed and service capacity in a place for some people, they may cause a problem with socio-spatial inequities to other places and other people. Recently, accessibility-based transport approach has been widely discussed and applied to evaluate the performances of transport improvements. Accessibility is a product of mobility, proximity and remote connectivity. Accessibility-based planning focus on facilitating passengers and freight's access to destinations rather than mobility itself. It has a system view on passengers and freight's movement, including transport, land use, economic development and social features. It is believed that there is a shift from mobility-oriented analysis to accessibility-based analysis is occurring in transport planning.

However, even though the conceptions and potential advantages of accessibility-based planning have been widely discussed, a key question is still remaining to be answered: how to make it happen? This paper aims to
answer the question. First, a basic comprehensive theoretical formwork for accessibility-based planning is proposed in the paper. Second, the policy performances of accessibility-based planning is discussed in terms of its effectiveness, efficiency, enforcement and equity impacts. Third, key technical and institutional barriers to the fulfillment of accessibility-based planning are justified and discussed. Finally, policy options are suggested to overcome the barriers. The discussions and conclusions in the paper would enhance our existing knowledge of the theory and policy of accessibility-based planning.

References


Abstract Index #: 837

**SHARED SPACE AND BICYCLISTS: ANALYSIS OF PATHS TAKEN THROUGH SHARED SPACE INTERSECTIONS IN ENGLAND**

Abstract System ID#: 1274

Poster

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Shared space is a traffic calming technique and design concept. The technique is relatively new, and the majority of existing research concerns pedestrians only. This mixed methods study was international in scope focusing on intersections in England. The goal of this research was to understand how cyclists perceive and travel through shared space intersections by observing cyclists as they traverse selected sites and control sites and surveying those cyclists traveling through both types of sites. Using video observations of six sites in three cities, three shared and three control intersections, analysis of the paths taken by 1750 cyclists looked at the variation in the paths ridden through the control intersections as compared to the shared space intersections. The tracking of the paths chosen by cyclists at each intersection also noted whether crosswalks and/or sidewalks were used by the cyclists. The survey addressed the perceptions, bicycling experience, demographics, and path and route preferences by cyclists at both shared space and control intersections. It was hypothesized that cyclist paths would not show much variation between shared space and control intersections as well as that certain groups may avoid riding through the shared space intersections due to their increased perception of risk. Analysis also looked at the relationships between helmet use, bicycle type, and path choices. These findings may indicate that shared space designs do not benefit cyclists as the design theory itself states.

Abstract Index #: 838

**LAND VALUE IMPACTS OF TRANSIT ORIENTED DEVELOPMENT: WHAT DO EMPIRICAL STUDIES SHOW?**

Abstract System ID#: 1277

Individual Paper

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Transit oriented development (TOD) has gained popularity over the last two decades in the US and many other countries. An important attraction of TOD is its great potential to capitalize—in the form of land value
appreciation—the increased regional accessibility provided by the transit service, as well as the local convenience and amenity created by coupling mixed land use with pedestrian and bike-friendly street design. The resulting higher land values will enable local governments and/or public transit agencies to generate additional revenues through property value capture, which can subsequently reinforce public transportation investment and operation. Therefore, TOD could conceivably serve as an effective approach to financially sustainable urban development, while creating environmental and social values by reducing automobile dependence, increasing transit ridership, and encouraging non-motorized travel.

The basic question remains, however, as to what extent real-world TOD projects have fulfilled the great promise of land value creation and capture. While many researchers have published studies that were aimed at empirically examining the effects of TOD on land value, the results have varied substantially. The great majority of studies have found a positive land value impact, although the estimated gains show a wide range; but a few studies have found a negative effect on land value.

We are conducting an Energy Foundation-sponsored study that has two primary objectives: (1) to gain a better understanding of the land value impact of TOD, and (2) to explore and assess alternative channels through which TOD-generated property value can be captured by local governments and/or public transit agencies. This paper presents our research focusing on the first objective. The research design has two key components. The first is a meta-analysis of peer-reviewed studies completed during the last twenty years, which aims to more systematic and closely examine the estimated changes in land value attributed to TOD. We collect empirical results from about four dozens of published studies and employ meta-analysis techniques to synthesize the estimated effects of TOD on property values. We identify the studies that show, respectively, the largest, average, and smallest land value impacts and investigate the likely causes of these different results. The second key component is an empirical effort aimed at testing the hypothesis that a significant portion of the variation in the estimated land value impacts is due to differences in sample selection (e.g. cross-sectional studies using data drawn for different times after the transit service started). Using data from Seattle, we estimate hedonic housing price models based on different samples of property transaction data, which are drawn from different years of sales and from different areas near light rail stations, and compare the regression outcomes.

Our preliminary results indicate that land value changes in TOD areas vary considerably, with estimated housing price impact at one quarter of mile from transit station ranging from negative 8% to positive 50%, and averaging about 10%. Part of the variation is due to contextual factors such as the demographic profile and the design and layout of the TOD area, but part of the difference points to possible methodological issues that are common to many studies. While still in progress, we expect our hedonic housing price models will suggest that sample selection is, indeed, a significant contributor to the widely varied estimations of the land value impact of TOD.

References

Chinese megacities are undergoing rapid motorization. The aim of this research is to elucidate key factors in car ownership choice. Data are drawn from a recent travel survey conducted in Guangzhou, China in 2013. Attitudinal information, along with personal attributes, household characteristics, transit accessibility, and residential location variables are considered in discrete choice models. The results reveal that people who have better attitudes towards cars over public transit are more likely to be car owners. The study also shows that, although both substantial utility and symbolic utility are influential in car ownership choice, Chinese potential car owners highly value the substantial utility of a vehicle, rather than seeing car ownership merely as a symbol of wealth and status. Income and housing tenure are two important determinants in car ownership choice. A number of hypothetical pricing policies and systematic changes to the transit systems are also discussed in terms of their effectiveness in reducing car use for current car owners and wannabes. The paper concludes with a policy recommendation that, to manage motorization in China’s megacities, transit development and car ownership control are both necessary strategies.

References

Abstract Index #: 840
EQUITY OF EMPLOYEE PARKING CHARGES
Abstract System ID#: 1288
Individual Paper

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In the United States, driving remains the principal means of travel to work. National data for 2012 show that 86% of American workers commute using personal vehicles, with 76% driving alone and ten percent carpooling (Bureau of Transportation Statistics (BTS), 2012). National data also show that lower income workers, while spending less in absolute terms on commuting than do higher income commuters, spend a far higher share of their income on commuting. Low income workers use public transit, carpooling, biking, and walking more frequently than higher income workers, and this is helps them keep commuting costs down, but a majority of low income workers, including 66 percent of the working poor, commute by car and spend up to 10 percent of their income on commuting (BTS, 2003).

Parking charges can be a substantial portion of total commuting expenses. For example, the variable cost of fuel, tires, and maintenance is currently about 19 cents a mile (BTS, 2013) and the average commute length is about 12 miles, so that the variable cost of a round trip commute by car is about $4.56. While Shoup (2011) reports that 95% of US employees are provided a parking space free of charge, in urban areas where parking charges are in fact in place, they typically run $5-12/day (Auchincloss, et al., 2014). Such charges can double or triple the cost of commuting by car.

Furthermore, costs of providing parking are often considerably higher than such prices. A recent study shows that full cost recovery for parking built at national average (US) costs on urban land would require $10-30 a day in fees, and even more in areas with particularly high land costs (Tudela et al., 2014). In part because of these high
costs, a number of cities and some employers have shown increasing interest in reforming parking pricing, both setting prices to better reflect costs and passing the costs along to the consumer. However, the equity of such pricing remains an issue, as does concern that full cost parking could shrink the employer’s labor pool.

This paper presents an analysis of the equity of higher parking charges. The paper begins with a brief review of the literature relevant to the study, including work on the cost of providing parking and on mode choices and commute alternatives by income group. An analysis of parking price impact by commuter income quintile under various scenarios is then presented. Both national data on mode choice and parking costs and data for the case of Berkeley, California are analyzed.

Policy options that would combine parking charges with strategies for mitigating adverse effects on lower-income workers are then identified and evaluated. The paper shows that transit and rideshare subsidies can be both effective and equitable alternatives to subsidized parking, increasing welfare for the lowest-income workers. Likewise four day work weeks, part-time telecommuting, and off-peak working hours can be effective strategies for reducing costs for some subsets of the low income workforce, as well as reducing parking costs for employers.

The final section of the paper discusses implications and recommendations for employers and parking providers who may wish to pursue parking management strategies with an eye toward equity.

References
We examine both horizontal and vertical equity (Delbosc, Currie, 2011), and we use the standard measures of inequity used in public economics: the Lorentz Curve and the Gini index, in order to calculate the level of inequity within the transportation system. To evaluate horizontal inequity we calculate the accessibility by public transit relative to the automobile. To calculate vertical inequity, we weight the relative accessibility by the typical dependency on public transit in each zone modifying the approach used by Currie (2009).

Typically, accessibility is modelled at a granular level of transport analysis zones (TAZ) or census tracts. An adequate view of urban accessibility, however, demands analysis at a spatial resolution relating to human mobility - moving from one building at the point of origin and arriving to another building at the point of destination. Until recently, the possibility of this view was limited by the availability of spatially-explicit data. Nowadays, these data are available but their use raises heavy computational problems: a typical metropolitan area with a population of several million people, demands processing of hundreds of thousands of origins and destinations, tens of thousands street segments and thousands of transit lines of different kinds (Benenson et al., 2010; 2011).

We apply AccessCity (a program specially designed by Citygraph to carry out such heavy computation) to compare the old and new transit system in Metropolitan Tel Aviv, and to investigate the importance of specific transit lines. The analysis is based on a new measure of Access Travel Time ATT(O, M, W) spent by the travellers who start at a given origin – O and travel to all possible destinations D, for a given activity W (e.g. work), by a certain transportation mode M. The Access Travel Time is estimated for all origins and destinations (i.e. all 300K buildings within the Tel-Aviv metropolitan area) and for two transportation modes (private car and transit), and is then plotted on an accessibility map at the resolution of buildings.

High-resolution analysis of the transit network of Tel Aviv metropolitan area reveals large gaps in the accessibility levels between car-based and transit-based mobility, as well as particular places which are high dependent on public transit, and which are ill-served.

In our paper we examine several scenarios that show how to apply the proposed indices and the maps of these indices for the spatial analysis of transportation network changes and discuss their advantages and limitations.

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Transportation megaprojects typically cost more than $1 billion and can determine the future location of businesses and residences for decades if not centuries to come (Capka 2004). Megaprojects may be a governor’s lasting legacy, a city’s icon, and a designer’s claim to fame. They may also be a major source of contention when they have major cost overruns, are intrusive, displace residents and businesses, and have unintended environmental consequences.

This roundtable brings together scholars on megaproject planning whose work helps to explain conflicts and cooperation, and also reveals assumptions, arguments, and norms about the development and evolution of projects. Although a transportation planning process may appear to be a rational process based on standard and objective methodologies, it may actually mask a politicized process where decisions are made for reasons that are not technical in nature (Goetz and Szylowiwicz, 1997; Flyvbjerg, 2014).

This roundtable’s purpose is to synthesize and debate the state of knowledge about megaproject planning and to look to future research avenues to inform practice, scholarship, and education with the goal of improving project performance and public deliberation about major infrastructure. We will look specifically at two prominent cases, transaction cost economics, innovative finance and public private partnerships.

We will focus on two flagship megaproject case studies in the United States: the new Tappan Zee Bridge in New York and the San Francisco-Oakland Bay Bridge. We also will examine the application of transaction cost economics to explain how it can be employed to reveal the tradeoffs between pace of delivery, public participation, environmental compliance, and cost overruns on transportation projects (e.g., Whittington 2012). Integrating economics with the political science of implementation (Pressman and Wildavsky, 1984), we will review how transaction-cost economic analysis can be applied to comparatively analyze bridge megaprojects across the U.S., irrespective of form of project delivery, thereby creating an empirical basis for estimating the economic consequences of political decisions for this critical infrastructure.

Lastly, megaproject planners also look to innovative finance and public-private partnerships as the silver bullet to address project ills. We will highlight research where these approaches should be viewed with great caution as they can create unintended consequences that exacerbate complex projects (Siemiatycki, 2009).

Participants: Karen Trapenberg Frick, Assistant Adjunct Professor, UC Berkeley and Co-Director, University of California Transportation Center; Philip Plotch, Assistant Professor, Saint Peter’s University; Matti Siemiatycki, Associate Professor, University of Toronto; and, Jan Whittington, Assistant Professor, University of Washington.

References

Abstract Index #: 843
MONITORING GENTRIFICATION IN THE TRANSIT-ORIENTED COMMUNITIES USING PERFORMANCE INDICATOR
Abstract System ID#: 1324
Poster

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As required in California Senate Bill 375, Transit-Oriented Development (TOD) is being promoted as a major land development tool to achieve the goal of reducing Greenhouse Gas (GHG) emissions in the 2012-35 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). Since TOD promotes mixed land development near transit stations, transit can be more convenient while benefiting environment by reducing VMT and air pollutant. TOD can also increase mobility to people who cannot or would not drive. Increased mobility can help low-income people for their jobs and helps older residents for their daily activities (EPA, 2013).

While TOD is expected to bring benefits for environment and residents, there have been concerns about gentrification and displacement as a result of TOD (Pollack et al., 2010). Areas around rail transit stations particularly received concerns (Chapple, 2009). Kahn (2007) studied the changes in the Davis Square transit station in Somerville, Massachusetts and concluded that after opening the transit station, residents of college graduates increased more than 40 percent. Lin (2002) analyzed property values around transit stations in Chicago and found that properties closer to transit stations increased significantly than surrounding areas.

Several variables have been applied to analyze gentrification and displacement. Those variables include Household income and property values (Kolko, 2007; Chapple, 2009; Lin, 2002; Baum-Snow and Kahn, 2005), share of college educated residents (Kahn, 2007), and automobile ownership rates (Evans and Pratt, 2007). Pollack et al. (2010) also applied population growth, changes in housing units, racial and ethnic diversity, and immigration pattern in addition to the classical variables.

This study applies 2000 Census data and American Community Survey (ACS) 5 year data to analyze socioeconomic characteristics of the residents in TOD areas in Los Angeles County. Variables including household income, education level, housing cost, car ownership, racial diversity, and population growth are selected to monitor gentrification and displacement effect. The geographic unit of the analysis is census block group since it is the smallest unit of Census data. Half mile boundaries around TOD areas are identified to select the census black groups around TOD areas. A census block group is identified as TOD area when majority of the land of the census block group is included in the half mile boundaries around transit stations. ANOVA is applied to test the statistical significance of changes around transit stations over years.

The study demonstrates how Census data and ACS data can be used to monitor the changing socioeconomic characteristics in selected TOD areas. The study provides a better understanding of the linkage of TOD, transit use, gentrification and displacement. The study is also useful for policy makers and planners to develop policy and planning frameworks to minimize the negative impacts of TOD.

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Rapid urban expansion has radically transformed urban landscape of Chinese cities recently. It is believed that mainland Chinese cities have rapidly suburbanized. Schools, exerting an important influence on residential location decisions and the demand for area housing, are one of the most ubiquitous institutions shaping city and regional ecology, policy, and everyday experience. This study inquired if and how Shanghai is suburbanized by investigating urban form of all elementary and middle schools of Shanghai. This study measured land use, street network, and density within four buffers (100m, 200m, 400m, and 800m) of more than 1,200 elementary schools and middle schools in Shanghai. Spatial and multivariate regression models were applied to examine the changes of urban form of school neighborhoods in Shanghai. Preliminary results showed that school neighborhood in old city centers had more diverse land use and denser street networks.

References

HOW SAFE IS THE MIXED LAND USE: A CASE STUDY OF MIAMI-DADE COUNTY, FLORIDA

Problem: According to American Planning Association (2012), “mixed-use developments include quality housing, varied by type and price, integrated with shopping, schools, community facilities, and jobs”. In recent years, planners have been advocating smart growth principles, promoting mixed land use development to battle urban sprawl problems and build better communities. However, whether the mixed land use is beneficial or harmful to transportation safety is a question that has not been well studied.

Existing Research: Many safety studies have looked at the influence of land use and other built environment measures on traffic crashes. Most studies have studied specific land uses and crashes in isolation and have rarely considered the land use mix index. Additionally, the widely used statistical methods in crash analysis are inherently limited by assumptions and pre-defined underlying relationship between dependent and independent variables.

Research Objective: This research aims at exploring the influence of mixed land use on traffic crashes by using a spatial data mining method.

Methodology: This study uses a spatial data mining method to understand the relationship between crashes and built environment and specifically the land use mix. The study uses the transportation D variables framework that includes Density, Design, Diversity, Destination accessibility and Distance to transit. The Miami-Dade County area in Florida is selected as case study. All the data, including crashes and land use are processed in GIS environment at block group level. The land use mix index is calculated by using the entropy measure. The index is further discretized to three categories: big, intermediate and small by using a quartile based fixed method, which is the input for spatial association rule data mining method. The influence of mixed land use is mined for each crash.
type such as property damage only (PDO) crashes, injury crashes, fatal crashes, pedestrian and bicycle crashes and all crashes. Further, crashes for each type are divided into four groups by crash time based statistics analysis: (1) 12am to 6am, (2) 7am to 11am, (3) 12pm to 6pm, and (4) 7pm to 11pm.

Results & Findings: Several interesting results emerge from this research. First, no rules were mined for the small land use mix index for all types of crashes, regardless of crash time occurrence. This means that a low mixed land use has no effect on crashes. Second, more rules were mined for the intermediate land use mix index than for the big land use mix index. This was expected since the amount of intermediate land use mix was about twice as much as big land use mix as determined by the discretization process. Third, although the number of rules for big land use mix index was smaller than the intermediate land use mix index, the quality of these rules is not necessarily lower. Generally, the maximum and the mean value of rule lift (greater lift values indicate stronger associations) for rules containing big land use mix index are bigger than those that contain intermediate land use mix index for all crashes and PDO crashes. This means that highly mixed land use may result in more total and PDO crashes. On the contrary, the quality of rules containing the intermediate land use mix index is higher than land use mix index for injury and pedestrian crashes. Fourth, the influence of mixed land use on crashes varies by time. Statistically, more rules were mined for time group 2 and 3 than for time group 1 and 4, regardless of the crash type. The corresponding rule quality also is higher. This is expected since the travel activity in group 2 and 3 is larger than in group 1 and 4.

Summary: This study presents a novel method to understand the influence of mixed land use on traffic crashes. While the mixed land use can make communities more livable, this research suggest that the highly mixed land use could increase the number of crashes and PDO crashes in a community, which may make the community traffic unsafe. This calls for a balanced approach between livability and safety for planners and policy makers.

References
crime data, counts of trees, housing valuation data, foreclosure and vacant and abandoned structures and lots on a 13-block street segment with both one and two-way streets; and 3) a qualitative broken windows assessment using photography evaluating signs of visual distress on one-way vs. two-way segments. We find that one-way streets result in greater increase in collisions and injuries because of the increased speed. We also find noticeable differences in neighborhoods with one-ways having greater crime and abandonment; with a significant reduction in appreciation in housing values. Furthermore, our photographic assessment suggests that these street typologies also may contribute to degradation and the erosion of community. This provides support for an expanded thinking about how two-way street conversions may serve as a tool for increase greater connectivity, community, and sustainability.

References
path dependence in transport planning in Auckland and documenting the way to dislocate path dependence in favour of sustainable transport planning.

References


Track 15: Urban Design

Abstract Index #: 848
THE URBAN DESIGN STUDIO A PEDAGOGIC APPROACH TO URBAN SUSTAINABILITY: PROBLEM-BASED SOLUTIONS FROM THE CLASSROOM TO THE COMMUNITY
Abstract System ID#: 7
Individual Paper

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The urban design studio and university-community engagements have multiple goals. They include increasing university responsiveness to local needs, stimulating real world change, and preparing students to effectively address complex social challenges (Bourner 2010, Forester 1999). However, such approaches are complicated by a variety of factors including stakeholder expectations, power imbalances, and conflicting goals between educators and community members (Mansuri and Rao 2004). While the benefits of service learning programs to universities are well-documented, the experiences and benefits of such higher education partnerships to community participants is not as well-known (Netshandama 2010). Successful engagements seem to require community involvement and decision-making authority at every phase, mutual accountability and trust (Winkler 2013). This paper presents a series of case studies of community engagement and neighborhood empowerment in the development of a collective sustainable urban design plan/vision for inner-city neighborhoods. These neighborhoods are located in Columbus, Ohio and they have seen tremendous decline in population and economy over the past years.

The research team was challenged to ensure that the strategic vision was representative, and included the voices and perspectives of previously marginalized residents. Accordingly, a comprehensive and multi-scale (house, block, neighborhood, city) approach to outreach and engagement was developed. Additionally, a series of educational workshops and outreach activities were conducted that involved different segments of the population and diverse community groups in the identification of development priorities, a neighborhood health assessment, and education and assistance for green home rehabilitation.

The project findings show the value of mutual learning and education between community and higher education partners. Inner-city residents have diverse interests, wants, and needs that span many generations. Some of the challenges are acute, but all are interconnected, making it difficult to prioritize. While the project activities and documents reflect a community vision, there is ongoing need for participatory approaches where knowledge and solutions are produced and shared among everyone involved to provide guidance for future development.
SEPAREATING THE PERSONAL, PROFESSIONAL AND POLITICAL: REALISING EFFECTIVE URBAN DESIGN REVIEW ON TORONTO’S WATERFRONT

Abstract System ID#: 24
Individual Paper

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Governing authorities commonly use design review to widen the availability of design expertise and raise the design quality of new development (Paterson 2011; Punter 2011). Design review typically includes the critical independent assessment of development proposals on behalf of the public planning authority either by a panel of experts, planning officials, politicians, or some combination of the above (Scheer 1994). Local institutional norms and jurisdictional limits mean there is no standard method of review; some design review processes are mandatory, while others offer informal advice to decision-makers, and design review might be conducted at the local, regional or even national level. In addition, when a panel of experts is involved in the review process, membership might be limited to registered architects or open to a wide cross-section of built environment professions. In some instances, especially at the neighbourhood level, the members of a design review panels can also include local residents (Punter 2003).

The variability of design review means that its scope and effectiveness is often questioned. Design review methods have faced criticism for being vague, capricious and arbitrary (Punter 2011), and academic researchers have challenged the assumption that discretionary review processes necessarily lead to better outcomes than traditional zoning (e.g. Nasar and Grannis 1999). In this paper, the case of the Waterfront Design Review Panel in Toronto, Canada, is used to pinpoint some of the challenges associated with delivering effective design advice via peer review. Established in 2005 by the Toronto Waterfront Revitalization Corporation (TWRC), the Waterfront Design Review Panel was the first review body to be established in Toronto. A group of high profile built environment professionals sit on the panel and offer non-binding advice on all waterfront redevelopment projects, including masterplans, public realm improvements and new buildings. The research findings associated with this paper are drawn from a content analysis of the design review panel’s meeting minutes between 2005 and 2008 and are further supported by a series of semi-structured interviews conducted with panel members, presenting designers and representatives of the TWRC and the City of Toronto planning department.

The paper begins with a review of the literature and a categorisation of commonly employed design review methods. Turning to the case of the Waterfront Design Review Panel, it tracks the development and evolution of the waterfront panel’s procedures and evaluates the effectiveness of its advice through the lens of two major projects. The paper argues that the review panel initially faced some of the criticisms associated with design review, including that its advice could be arbitrary, that it lacked objectivity, and that political considerations and personal whims were allowed to unduly influence the review process. The paper considers how the panel responded to these criticisms and outlines the steps that were taken to improve the panel’s decision-making procedures and its capacity to influence design outcomes.
Reflecting upon the categories of design review established at the start of the paper, the paper ends with a series of lessons that focus on the future of peer-led design review. It is argued that, despite the positive role design review can play as a mechanism of design governance, it remains a fragile discretionary tool. The paper contends that further academic attention should focus on how the personalities and politics of individual panel members and presenting designers can be mitigated during the design review process and whether collective peer assessment, as practiced on Toronto’s waterfront, is the most effective method of reviewing urban design during the planning approval process.

References

DECOMPOSING VISUAL PREFERENCE SURVEYS OF URBAN DESIGNS USING EYE-TRACKING

Visual preference surveys have been used for many years to elicit public perceptions of the desirability of alternative urban development designs. These images are presented at public meetings and attendees are asked to rank the desirability of alternative images. Often these will contrast typical sprawl landscapes, i.e., surface parking, strip-malls, and dense traffic scenes, with “livable” community elements, such as pedestrians, walkable streetscapes, and light-rail transit. Generally, participants find the less sprawling images less desirable; however, it is not clear what specific components of the images affect those rankings. This research is aimed at decomposing the details of community images and linking these to the rankings that are given to them. Methodologically, we use eye-tracking technology to record fixations and eye-movements associated with images that have been shown to a convenience sample using an on-screen computer survey. Correlations between the image rankings, eye fixations and movements, and the specific elements of interest in the image are cross-analyzed to determine how individual elements in an urban development may affect the desirability of its image. For example, do our respondents fixate on the presence of people on the street? on “green” transportation modes (light-rail or bicycles)? on elements of new urbanist architecture? Likewise, are longer fixations associated with “undesirable” elements, such as parking, traffic, or images of sprawl? The results of our research provide information for planners, developers, and architects to understand how best to craft desirable developments, with urban design characteristics that people find preferable, while avoiding less preferred features. The research also provides information on the process of soliciting visual preference data; what components of the images do people fixate on? This can provide a unique understanding of better ways to design visual preference surveys, for use in future research and planning practice.
Abstract Index #: 851

PERSPECTIVES ON DESIGN GOVERNANCE: CURRENT TRAJECTORIES AND NEW DIRECTIONS

Since the early 1970s, studies of design review and development management have been an important sub-focus within the urban design discipline (e.g. Barnett 1974; Scheer and Preiser 1994; Punter and Carmona 1997). The term ‘design governance’ is increasingly employed to describe the suite of ‘second order’ (George 1997) tools and mechanisms that can be used to regulate for design quality during the planning process. Research on design governance has catalogued the growth of discretionary tools, such as design review, public participation and design competitions and, perhaps paradoxically, the parallel rise of prescriptive control mechanisms, like form-based codes and historic preservation guidelines. The literature has shown, among other things, that clear, transparent and consistent design governance procedures can improve the quality of design outcomes. Yet, it has also demonstrated that design control and review mechanisms can easily be manipulated, lead to arbitrary decisions and stifle creative freedom.

Observing that the design governance research agenda is increasingly fragmented, with scholars largely focused on the evaluation of discrete design tools and mechanisms, this roundtable will critically explore recent advances in design review and development management and debate the future role(s) of urban design as a city building tool. The roundtable will also be premised on the idea that the context for design governance has shifted over the past decade (White 2015). The 2007-08 financial crisis led to unprecedented cuts in many municipal budgets and slowed investment in the real estate development sector. The lacklustre economic recovery has put further pressure on the regulatory framework for design and precipitated a tendency towards ‘commonplace’ solutions and unreflective practices that are too often focused solely on economic growth. Decision-making continues to be hampered by subservience to real estate prerogatives, a reliance on ‘big architecture’ design solutions and an undue emphasis on building aesthetics over morphological form and function.

Yet, at the same time, new avenues for progressive design governance are emerging and the actors and institutions involved shaping design outcomes continue to evolve and change. The spectre of climate change has inspired some governing authorities to embrace green planning solutions and create opportunity spaces for enhanced design governance via initiatives that support suburban retrofitting, city centre regeneration and ecological urban infrastructure, such as green roofs and wildlife corridors. Equally, the role that local people can play in design decision-making is expanding in new and exciting ways. Formal methods like the ‘charrette’ are becoming more and more ubiquitous, while radical initiatives, such as guerrilla urbanism and other citizen-led
projects, are challenging the traditional regulatory context for design governance and forcing urban designers to reassess their expert role in the planning process.

Reflecting on these various themes, roundtable participants will be encouraged to draw upon theory and empirical research to consider the current trajectories and new directions of design governance by addressing the following, broadly defined, questions:

1. What are the main challenges faced by planners and urban designers involved in design governance?
2. How can design governance help to create locally meaningful, adaptive and resilient places?
3. To what extent can design governance balance public and private sector professional expertise and local community knowledge?
4. Must design governance always be driven by the public sector if it is to be successful?
5. Are accepted methods of design governance (e.g. design review, design codes, design guidance) still relevant in today’s practice, or are new tools and mechanisms (re)shaping the institutional landscape of design decision-making?

References

Abstract Index #: 852
WHAT ARE URBAN DESIGN METHODOLOGIES?
Abstract System ID#: 112
Individual Paper
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While many leading scholars in the area of physical planning and urban design continue to call for “putting the physical back in planning” and reemphasizing the centrality of the production of urban form (Talen & Ellis, 2002), the role of urban design research and its range of methodologies continue to fit awkwardly in the realm of scholarship and pedagogy of urban planning. As an illustration, the 430 page manuscript Research Methods in Urban and Regional Planning (Wang & Vom Hofe, 2007) mentions urban design only once on the second page. A debate over the relationship between urban planning and design flares up every few years, such as in a commentary and series of responses the June 2011 issue of the Journal of Planning Education and Research (Gunder, 2011). Urban design is often seen by urban planning academics as the province of architects, landscape architects or “designers”, despite its deep historical links to planning and its central role in the production of urban space and experience. For many the term “design” becomes a catchall for any physical planning research that does not adhere to a post-positivist epistemology.
This paper seeks to contribute to and reinvigorate this important debate about urban design methodology in relation to urban planning scholarship. There are three primary questions addressed in the paper. First, what are the best examples of good urban design research? Second, what research methods do these examples employ? Third, how does urban design research relate to dominant research paradigms in planning more generally? By reviewing the range of good urban design research (research that is impactful, meaningful to the understanding and practice of urban planning), cataloging the methods used and relating them to the dominant research paradigms today, this research concludes that a wider recognition of urban design methodologies should be accepted in planning research and pedagogy. A more open stance to urban design methodology, a “catholic approach” that draws on the insights of multiple disciplines and epistemological stances (Moudon, 1992), can invigorate urban planning research and pedagogy - and help put the physical back in planning.

References

Abstract Index #: 853
RESTORING LOST DENSITY: INFILL DEVELOPMENT INSPIRED BY LOCAL HISTORY
Abstract System ID#: 128
Individual Paper

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Decades of speculative commercial development, renewal, and policies to expand parking facilities and roads have reduced the dense, mixed use centers of the 19th and early 20th century suburbs into monotonous, auto-oriented, under-utilized commercial centers. One strategy in increasing the supply of housing and other uses in inner suburbs is to target it towards these commercial centers. These policies can, however, face criticism for promoting development that is too dense or not consistent with the character of the town. In order to demonstrate the consistency of infill with community character, this paper explores the possibility of taking a historically-inspired approach to infill by assessing the extent of lost residential and commercial density in these centers. It also explores the considerations necessary in creating design guidelines that will make new construction referential to lost commercial and residential architecture. The paper uses a case study of Watertown Square in the Boston suburb of Watertown, Massachusetts.

Abstract Index #: 854
FOUR URBAN DESIGN PARADIGMS IN LISBON, PORTUGAL - LESSONS ON LIVABILITY AND PLACE MAKING
Abstract System ID#: 133
Individual Paper

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Portugal’s admission to the European Community in 1986 led to international repositioning and investments in urban design and livability. This paper discusses four dominant urban design paradigms in the shaping of Lisbon, how they reflected international movements, and their lessons for the future.

The first paradigm was born from the need to restore Lisbon’s downtown devastated by the 1755 earthquake. Reconstruction followed Illuminist ideals including a regular grid pattern over the medieval tissue improving
connectivity, respecting pre-existing public spaces, and providing a monumental identity while imposing architectural and earthquake-resistant building guidelines (Santos, 2000). Known as the Baixa Pombalina the area is a top tourist attraction and a candidate to UNESCO’s World Heritage Site status. However, it suffers from depopulation, the growth of tourist-oriented uses, and the expensive challenges of architectural preservation.

The second paradigm resulted from federal projects to handle urban growth and public housing in late 1930s under the military dictatorship. Alvadade, for instance, a neighborhood for 45,000 residents was based on the neighborhood-unit with a pedestrian network, a mix of walk-up and high-rise apartment buildings with retail in the ground floor, and public facilities (Costa, 2002). It represents the passage from “culturalist” to “modernist” urbanism, and became a very desirable neighborhood perfectly integrated to the urban fabric.

Portugal’s current repositioning in the global scene led to a third urban design paradigm represented by the 1998 World Exposition and the subsequent redevelopment of a 120-acre area and its 3.1 miles of riverfront by the Tagus River. According to Lisbon’s 1995 master plan, the event would be the catalyst for a new district that would provide the city with a new centrality (Craveiro, 1997). The infrastructure built for the fair would support this goal such as a new bridge across the Tagus, a new subway line with seven stations, an iconic multi-modal transportation hub designed by Santiago Calatrava, and the realignment of the waterfront. Named Parque das Nacoes, the new district became Lisbon’s most important real estate operation including a premier business district; parks, recreational uses and restaurants along the waterfront; and an estimated population of 25,000 people. Showcasing modernity and internationalism the area became a tourist destination but remains exclusive to the upper-middle class and is disconnected from the distressed surroundings.

The forth paradigm corresponds to the current planning efforts to regenerate the historical centers in Lisbon and much of Portugal which, in part, reflect funding from the European Community (Balsas, 2007). These are based in programs and projects for economic regeneration, livability, and place making. In Lisbon, this paradigm is reflected in the city’s 2010 strategic plan (CML, 2010). To position the city as Europe’s Atlantic capital, the plan identified development opportunities and calls for the integration of planning, urban design, social, cultural, and historic programs, within a framework of creative innovation, livability, sustainability, regeneration of the existing urban fabric, and public participation. However the economic, social, and cultural limitations imposed on the building stock and the city fabric by centuries of overlapping historical layers are enormous.

Although in the late 1970s Portugal overturned a long period of oppressive centralized regimes what followed re-democratization was fragmentation of public powers and responsibilities. In the last decade, Portugal’s desire to become a global player together with imperatives from the European Community has lead to a governance of more integrated and strategic decision making as well as participatory processes. Within this framework, future planning and urban design efforts in Lisbon as well as in the US and elsewhere, can learn important lessons on livability and place making from the four paradigms discussed herein.

References

Planning has been at the forefront of discussion to deal with urban ills of health, crime, congestion, pollution and safety and security in urban areas. No doubt, planning has become one of the critical approaches to sustainable communities. Several planning and design approaches ranging from Ebenezer Howard’s “The Town-Country Magnet” to Peter Calthorpe’s “Pedestrian Pocket” have inspired the recent movements of Smart Growth, New Urbanism, and urban metabolism in planning. These movements recommend development forms that support the principles of sustainability such as the compact mixed-use developments, reduced auto-dependency, increased use of walking and biking, better connectivity to public transportation, and higher densities. The emergence of the sustainable development concept in 1987 brought with it a new frontier aimed to restore the role of urban design in promoting sustainable development. Sustainable development, as it pertains to urban design, is mostly about the form (the morphology of the built environment). Which “form” a city should take and which attributes shape its society are “ancient questions” (Lynch, 1981, 73). However urban design is also a set of relationships and flows controlled by technical and socio-economic processes (Kenedy et.al, 2010; Ferrao and Fernandez, 2014).

Such processes have inspired the developments of the seaside community in Florida that have adapted and implemented several sustainable urban form strategies. However such developments cannot be classified as ‘Sustainable Communities”. Masdar City, in Abu Dhabi, UAE, is one of the first examples of new urbanist and eco-balanced sustainable planning approach implementation. This is not unique as several other regions have planned similar sustainable cities which is yet to be implemented.

Envisioned by Norman Foster, Masdar City, one of the world’s first sustainable city incorporated both principles of new urbanism and eco-balanced design applications to make it self-sustaining. Masdar City has been planned as the “green print” for sustainable urban development, and recently as a strategic business hub. The utopian plan housed in 700-hectares (2.7 sq. miles) accommodates 40,000 residents and 50,000 commuters with 1,500 businesses, and seven international institutions including Siemens, IRENA, GE, and Mitsubishi. Using advanced technology energy-efficient structures, renewable energy sources, waste management, water management, and oil-free transportation, it ensures carbon neutrality and more environmentally responsive urban setting (Masdar City, 2009).

In terms of mobility, Masdar City was envisioned with no cars and only pedestrian mode of travel. The superstructure of high density mixed used were on raised platform with services and infrastructure, freeing the surface from vehicular movement. It was to be served by a network of approximately 26 miles of automated battery driven personal rapid transit (PRT). The LRT system connected the individuals of the city to the adjacent cultural and recreation districts of Saadiyat Island and Yas Island. The Metro connected the city to the Abu Dhabi International Airport and the CBD of Abu Dhabi.

Driven by advancement in technology, change in fiscal standing of the city, and better understanding of success and failure of the sustainable approaches, the city during the 2008 economic decline has modified its originally proposed sustainable “utopian” planning approach to a sustainable “adaptive” planning approach. Although the original vision of Norman’s plan still exists, the modified plan embraces the required adaptation to meet the needs of changing demographics’ social, economic, and environmental understanding of the place. The new plan uses the lessons learnt from the utopian plan and has implemented changes in its land use, transportation and energy elements of the plan. This presentation discussion the lesson learnt and adaptable changes in the new plan.

References
Within the context of China’s New Urbanization strategy, this paper examines the possibilities for China’s landscape and ecological recovery in the face of its previous Urbanization’s deterioration of ecology and cultural identity. In opposition to China’s recent previous urban development strategies, a renewed relationship between nature and culture through new models of urbanization operate at the intersection of urban design, planning and ecological systems. These include the reconfiguring rural to urban built typologies having the agency to be transformative, in addition to the reinse rtion and embedding of everyday social and cultural practices and processes in China within public space in Chinese cities.

Additionally, China’s recent urbanization has been explosive. In an inversion which first began with its opening up again to world market forces in 1978 with Economic Reform under Deng Xiaoping, it is projected that China’s population will transition from 80% rural and 20% urban, to 80% urban and 20% rural by the year 2050. Consequently, the massive construction and development projects that this phenomenon has prompted have had a significant impact on valuable agricultural lands. These have been eaten up for development. The transferring of land for development is immediately more profitable for Municipalities and local leaders then it’s past land use of food production. Of significance, in a country with a strong and rich agricultural landscape that used to be self-sustaining.

The recent Eco-city project in China initially presented the potential to address a number of issues of sustainability. While these have done so in part, primarily at the building systems scale it can be critiqued that they have been lacking in an entirely integrative sustainable and meaningful public space. Their construction and development have, in some cases, actually undermined their actual landscapes and the eco-systems services, which they provide. While recent trends in Western cities have begun to adopt urban agriculture as strategies, China’ cities continue to adopt more City Beautiful movement approach to its landscapes.

This paper explores possible alternative building typologies, which take the valuable qualities and characteristics of rural building typologies and reconfigure them into urban ones. It explores their potential to create hybrid programs and typologies, which can create opportunities for urban agriculture. It does so through the analysis and discussion of selected case studies. This includes design research, in addition to analyzing the results of an urban design studio run in collaboration between Chinese and US students run by me, which examined alternative methods for urban development using the Tianjin Chinese Eco-city as a lens to do so. The studio examined alternative solutions to the prevailing prescriptive zoning and building massing and spacing, which are conducive to creating the Modernist tower in a park model in Chinese cities. The studio also re-examined the role of ecology in the design through integrated landscape and ecological planning as a methodology. Further, the studio looked at the possibilities of activating the spaces in between the buildings as productive landscape, which might include harvesting water collection, producing energy, in addition to creating productive urban landscapes. It examines these strategies across a spectrum of design scales: the building envelope; master planning and their integration to larger landscape and ecological systems of design.

In conclusion, this paper offers possible new models for rural building typologies reconfigured as new urban ones, addressing issues of food security and the recovery of China’s agricultural and water landscapes, in addition to positing how these provide new possibilities for re-inserting and re-embedding everyday social and cultural practices and processes in Chinese cities.
In examining recent changes in urban form and structure, there has been an interest in how entrepreneurial governance strategies – marked by a focus on competition, outside investment, and promotion – are re-shaping urban space (Hall & Hubbard, 1998). The role of urban design in facilitating, or even initiating, entrepreneurial strategies can be significant. Hubbard (1996) has argued that architecture and urban design play a key role in “lubricating” the transition to the entrepreneurial city model through a new urban aesthetic premised on consumption and tourism. The entrepreneurial model is seen as leading to a form of urban design characterized as piecemeal, opportunistic and project-oriented, prioritizing the “proactive pursuit of real-estate investments through financial incentives, ‘deal-making’ and megaprojects” (Kipfer & Keil, 2002, p. 243).

Fundamentally, the entrepreneurial city model is based on the idea of a shift in the orientation of local strategies: city governments once charged with providing services for residents are now focused on creating market-based strategies to attract investment. While this re-orientation is the premise for understandings of entrepreneurial urban design (see, for example, Biddulph, 2011; Gospodini, 2002), there has been little empirical research demonstrating that cities’ approach to shaping built form and urban design has changed over time. While there is support for contemporary practices fitting within the entrepreneurial model, there is less known about whether this represents a break with previous urban design practices or follows an existing pattern of practices. This work addresses this important gap by focusing on three key questions:

1. To what extent do contemporary urban design plans and projects display an orientation towards entrepreneurial strategies?

2. Are entrepreneurial urban design strategies observed in historic design plans and projects? How do these differ from contemporary forms of urban design practice?

3. How can differences in entrepreneurial urban design strategies between eras inform our understanding of urban design practices?

This paper uses a mixed method approach that draws on critical discourse analysis of urban design plans combined with interviews and archival research. Focusing on two cities with significantly different urban design cultures – Toronto and Los Angeles – this work analyzes urban design plans from the post-war period to contemporary times in light of their orientation towards entrepreneurial strategies of design. Preliminary findings show that while contemporary urban design practices clearly align with the entrepreneurial city model, similar discourses of growth, investment and competition shaped early instances of urban design plans and projects to varying extents. This paper will explore the need for a more nuanced approach to understanding urban design practices in the context of the entrepreneurial city model and the implications for urban design practitioners and scholars.

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Contemporary sustainable urbanism including Smart Growth, New Urbanism, and LEED-ND (Leadership in Energy and Environmental Design for Neighborhood Development) has a strong belief of urban agglomeration that high density development is basically a good urban development method. This is thought to be a result of reflecting existing practices of pervasive suburban developments in America. Under the context, this paper explores a new trend of urban renewal through megastructure demolition, which shows an opposite way from the contemporary sustainable urbanism. The recent and striking trend in revitalizing old and dilapidated urban centers aims at development of emptiness rather than that of fill-up. In other words, it puts people ahead of built environments. For this, old and expired megastructures which were used as vital infrastructures are demolished. Then, new and relaxed urban spaces are provided for their rests, amusements, and activities.

For this research, the paper takes three major steps: First, the paper addresses the recent trend of urban renewal through megastructure demolition. Second, the paper conducts a case study with two extreme planning projects in Seoul, Korea and Seattle, US. Finally, the paper identifies what pros and cons each planning project has. More specifically, the two extreme planning projects are Seoul’s Cheong-gye-cheon Restoration Project, and Seattle’s Alaskan Way Viaduct Demolition and the Replacement Tunnel Construction. They have same purpose of urban renewal and similar physical solution of megastructure demolition. However, they are also quite different in terms of background (key figure and main event), decision making (top-down and bottom-up), and implementation process (cost and speed), which were considered to originate from cultural difference between Seoul and Seattle. As a result, they will show that this trend is global, but the details are somewhat different.

The first case, Seoul’s Cheong-gye-cheon Restoration Project, is currently respected as a globally successful project because it was fast, effective, and ecological in revitalizing Seoul’s old downtown. It demolished old concrete structures which had been used as viaduct since it was built in 1970s. It provided urban waterfront park ranging about 6 km, just with the construction period of 27 months, July 2003-October 2005. Meanwhile, the actual cost was KRW 386.7 billion or US $281 million. The second case, Seattle’s Alaskan Way Viaduct Demolition and the Replacement Tunnel Construction, is an ongoing project which demolishes the Seattle Alaskan Way Viaduct, replace it with a new underground tunnel, and provide new waterfront in Elliott Bay. The bored tunnel is being built by using a tunnel-boring machine called Bertha which has a record-breaking diameter borer of 17.5m. The construction started in 2011 October, and is currently expected to be completed in 2019. The initial estimated budget was US $42.5 billion, but the actual cost is anticipated to be increased.

To sum up, the paper aims not only to comprehend the global trend of urban renewal through megastructure demolition, but also to raise the cultural awareness in the era of globalization. Finally, the paper expects to provide a good chance to ask what kinds of urban renewal developments will be appropriate and good for today’s sustainable and resilient urban environments.

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Central Theme: Senior citizens remain a highly underserved group in regards to parks. This despite the fact that studies find a positive relation between physical and emotional well-being and spending time in a natural setting. Studies have also shown that physical activity that is tailored to the needs of participants can benefit even the oldest and most frail senior citizens. Researchers have argued that a regular physical activity regimen among the elderly may even slow the aging process. Despite the strong link between walking and physical activity and health, older adults represent the most inactive portion of the population. We know little about the needs and preferences of different elderly groups in regards to neighborhood open space or the influence of objective and subjective features of the neighborhood built environment (e.g., walkable streets, availability and proximity of parks and recreational facilities, availability of exercise equipment, pedestrian amenities including sidewalks or footpaths, adequate lighting, and intersection crossing features; aesthetics such as foliage, pleasant scenery) on the physical activity patterns of different elderly groups.

The relative lack of research is accompanied by a complete lack of recreational and park facilities designed with the needs of the elderly in mind in Los Angeles and other US cities. In contrast, cities like Shanghai and Taipei have retrofitted their parks with exercise equipment geared towards the elderly, while London opened its first playground for seniors in May 2010 at Hyde Park, equipped with low-impact fitness machines. It is clear that the US lags behind when it comes to identifying the open space-, passive- and active recreation needs of its elderly.

Research Questions and Methodology. The study will start addressing these issues by responding to the following research questions.

1. What are the senior citizens’ needs, preferences, and aspirations in regards to neighborhood parks and how do they differ in terms of gender, racial/cultural characteristics, and health status?

2. What are the challenges and impediments that often decrease seniors’ access to neighborhood parks?

3. What do planners need to know in order to plan and design senior-friendly parks? What are appropriate design guidelines for such parks?

To respond to these questions the study draws from both primary and secondary sources as well as an overview of specific open spaces built in different parts of the world for seniors. Primary sources included eight focus groups with ethnically diverse seniors at St. Barnabas Senior Citizen Center in Los Angeles, and interviews with nine representatives of local nonprofits, and state and federal agencies focusing on issues related to aging and open spaces. Secondary sources included a detailed scanning and examination of the scholarly literature on the open space needs of seniors, as well as published design guidelines on healing gardens and therapeutic landscapes, and tool kits and manuals about the design of age-friendly cities.

References

URBAN FORM AND RETAIL CENTER SUSTAINABILITY

Abstract System ID#: 244
Individual Paper

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Location is commonly axiomatically stated as the most important real estate feature. However, the risky real estate sector—retail—is commonly considered at a spatial scale—e.g. traffic analysis zone, census tract, or metropolitan-wide area—so coarse that little, if any, is revealed about urban form characteristics that likely influence the viability or sustainability of the retail store at a particular, site-specific location. While the significance of “location” is well-known in real estate discourse, little attention is given to the urban system that reveals how location is configured, and how that configuration sustains the viability of retailing activity in the metropolitan region. In this paper, we use block-level, GIS-aided spatial data that reveal the physical qualities of the retail center’s built environment—its land use mix, its accessibility from nearby housing and elsewhere in the region in a nodal location—as well as its employment and business activity. Thereby, we examine a hypothesis that retailing viability is linked to urban form and set out to determine a statistical relationship. Retail sales data are used to indicate the viability and sustainability of businesses in the retail center. Two nodal locations of retail, urban vs. suburban, anchored by an identical big-box retailer downsized to a neighborhood store with pedestrian-friendly orientation and proximity to housing, were matched. The paper concludes with regression estimates of the urban-form determinants of business viability by various distances from the retail center.

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More specifically, we asked whether and to what extent does moving to mass housing affect children’s satisfaction with the residential environment?

Data is drawn from an on-going research project in Ankara, Turkey, called “Living in the Turkish Housing Development Administration’s (TOKI) mass housing.” TOKI is a governmental institution tasked with the mission of alleviating the country’s housing shortage. It also acts as the primary institution in the country responsible from the implementation of urban regeneration projects. In Turkey, as in some other parts of the world, urban regeneration has been dominated by property-led redevelopment (see, for example, Butler and Hamnett, 2009; He and Wu, 2005). In squatter housing regeneration projects of TOKI, this entails the demolition of squatter houses and replacing them with high-rise apartments, which are usually constructed on the same site and at a higher density (Karaman, 2013). These housing units are then made available to displaced residents for purchase via mortgage loans and to the public at market prizes.

In TOKI projects a cookie-cutter design is implemented. All buildings look alike and are designed only for residential purposes. High-rise apartments are arranged in superblocks. While some apartments are clustered around a small playground equipped with a decent amount of playing equipment, others are grouped around large parking lots. Most TOKI projects lack recreational and sport facilities. Oftentimes, especially in crime-prone neighborhoods, to protect their community from hostile outsiders, residents build large gated walls around their apartments. In Ankara case, while some of these mass housing developments are located inside the heart of the city, some others are located in the urban periphery. In this study, the authors focus on a TOKI project located near the historical city center of Ankara.

Forty-one children, ranging in age from 9 to 12 years old and living in a mass housing development that was built in the context of a squatter housing regeneration project participated in a survey, focus group, photo-voice and mapping activity. While some of the child participants moved to TOKI units from the destroyed squatter settlements, some others moved from neighborhoods with higher socioeconomic status. In surveys, the authors investigated children’s satisfaction from their past and current houses, as well as from their past and current neighborhoods. In the paper, the authors will present the results obtained from the surveys, focus groups and mapping activities.

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References

Abstract Index #: 862
EPHEMERAL EVENTS, PERMANENT PLACES? CONSTITUTING KAKA’AKO
Abstract System ID#: 293
Individual Paper

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Place-making, especially its temporary urbanism variant, functions both as expressions of collective needs and as pedagogical demonstrations of urban behaviors and aesthetics. The burgeoning popularity of short-term spatial interventions or temporary place-making, signal a shift within urban planning practice and discourse towards
flexibility, conviviality and creativity. At its most enticing, temporary place-making offers an “action research” method that avoids the dull musty meetings of bureaucratic planning. Unsurprisingly for a relatively new set of practices, most public discussion has been dominated by proponents offering descriptive compilations of successes that tout the benefits to community building and economic development. While often framed as a collective exercise of the right to the city, temporary place-making is not necessarily a radical departure from the status quo and does not escape neoliberal redevelopment discourse. The current vogue for place-making emphasizes the importance of social space without sufficiently grappling with the conflicts and contradictions within social processes. By skipping these conflicts, many temporary urbanism projects are reinforcing definitions of appropriate users and uses of urban space that exacerbate existing inequities.

This research seeks to extend the conversation by critically examining the adoption of temporary urbanism in the context of one neighborhood in one city that is shaped by global processes of colonialism, capitalism, and globalization. On an island framed by tourist reflections of Waikiki and the anti-urban struggles to sustain land-based Native Hawaiian genealogies, what does “being local” look like amidst the concrete and car exhaust of Honolulu? This case study of Kaka’ako, a mostly light-industrial neighborhood undergoing massive high-profile redevelopment, examines the proliferation of ephemeral creative place-making projects within the neighborhood to understand 1) how these practices are situated within globally circulating discourses of the urban and the specific histories and practices of the neighborhood; 2) what work are ideas of neighborhood, localness and community enlisted to do; and 3) how do artists and creative industries entrepreneurs become emplaced as “vicarious residents” and constituted as a community of stake-holders. Using ethnographic research techniques such as participant-observation, semi-structured interviews, as well as social media analysis, this case study focuses on the artists and entrepreneurs engaged in short-term spatial projects in Kaka’ako and three projects in particular that each exhibit a different temporal rhythm: an annual mural festival, a monthly night market, and a warehouse/event space that is open daily.

Although these projects enjoy the financial support or outright sponsorship of the major landowners, the organizers involved are seeking more imaginative outcomes than real estate development. Temporary place-making projects are an opportunity for Honolulu residents to engage in urban image-making and place identity formation that is not targeted for the tourist gaze. Through changing configurations of bodies, sounds, stories, and uses, the spaces created by ephemeral place-making practices enact contradictory definitions of belonging and place-identity that range from the exclusionary to the expansive.

I ultimately argue that the focus on temporariness can lend itself to erasure of place by presuming the value of change and by privileging aesthetics and entertainment over mundane daily needs. The people who most extensively and intensively inhabit the neighborhood spaces are delegitimized -- their need for shelter and access to electricity is permanent rather temporary. In contrast, the artists and entrepreneurs - who do not live in Kaka’ako - are empowered in their claims to neighborhood identity via their creation of temporary spaces. This form of flexible urbanism permits these actors to materialize globally circulating ideas of urban cool that obscure earlier understandings of the urban and the local that have been in operation.

Abstract Index #: 863
THE FLâNEUR, URBANITY AND VISUAL QUALITIES IN URBAN DESIGN: A STUDY OF LISBON, PORTUGAL
Abstract System ID#: 304
Poster
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Over the past decade, my frequent travels as visiting faculty to Lisbon, Portugal led me to develop an intense fascination with the city. I never get tired from admiring its history and geographic setting, its people and intense social life, its culture, and its urban design and architecture. I particularly love Lisbon’s historic core where all of these qualities result in a lively and engaging environment where you can walk tirelessly for hours. This poster explores my experience as a flaneur in Lisbon’s historic core, attracted by its urbanity and the visual qualities of its urban design.
Although it is impossible to fully define urbanity, it is perhaps planning’s most noble goal. Urbanity is about vitality, diversity, the human and existential dimensions of a city and its spaces (Gehl, 2010; Jacobs, 1961; Norberg-Schulz, 1979), and about the presence of differences and the experience of otherness in a city (Baudelaire apud Sennet, 1990: 123). As one experiences the city in movement, a fundamental key to urbanity is walking, specifically walking without a purpose as a flâneur. The flâneur is a literary figure created by Baudelaire (19th Century) to mean a man who takes pleasure in strolling and exploring city streets, observing life and its characters. The flâneurie is above all a visual experience, described by Honoré de Balzac as “gastronomy of the eye”. Walter Benjamin adopted the flâneur as the emblematic explorer of modern urban experience, and used the concept as an analytical tool—the observer-participant. For his flâneur the city is composed by dialectic poles as it opens up as landscape (enacting curiosity and exploration) and closes up as a room around him (enacting comfort and safety). Considering that beyond need one walks through an urban area first and foremost when he/she is attracted to the existing, emerging, and distant scenes along the route (Cullen, 1962), the flâneurie is about visual engagement through urban design qualities.

In my very personal analysis and inspired by Lynch (1981) I firstly identified the three most important and attractive meta-qualities in Lisbon make me want to go there in the first place: imageability, legibility, and the human dimension. As discussed further in the poster, these are place-specific and unequivocally result from the interplay between geography, history, culture, urban form, architecture, and people. They also set the stage for and allow the multiplicity of combinations and elements shaping the next level of my analysis. In the second level of my analysis I adopted the concept of flâneur as an analytical tool of the streets of historic Lisbon to consider the impact of the most popular visual qualities in the planning and urban design literature. These qualities are: legibility, coherence, surprise, complexity, robustness, transparency, vistas, enclosure, focal points, and personalization. Although culturally and individually biased, these qualities are largely accepted in our profession and have been adopted if not literary as goals then as inspiration for numerous plans and projects. The poster will present short illustrated discussions about these qualities and their embodiments in Lisbon’s historic core, demonstrating how they engage the flâneur and make his daily experiences revealing, unique and constantly changing, enhancing Lisbon’s urbanity and his/her thirst to continue to explore it.

References


Abstract Index #: 864
REGULATING WAYFINDING: FLEXIBLE APPROACHES TO CREATING NAVIGABLE PLACES
Abstract System ID#: 319
Pre-organized Session: Signs as Symbols of Cultural Landscape

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The American landscape has been transformed by on and off premise signs, particularly those which contain commercial messages. Planners have had a love-hate relationship with signs, often describing their impact on the urban landscape as visual blight. Given this perspective of signs, planners have attempted to place stringent regulations on signs. These regulations often pit the business community and the city as adversaries, failing to understand the importance of way finding on the vitality of the local vitality.

This paper seeks to explore the evolution of the ways in which regulators have gone about attempting to regulate signs. It analyzes the impact of these regulations on place identity and cultural preservation, and proposes a regulatory framework that allows the necessary flexibility necessary to allow signs to become a part of the urban landscape.
The world is suffering from an obesity epidemic, but public health research suggests that regular physical activity can prevent obesity and a series of chronic diseases (Warburton, Nicol, & Bredin, 2006). Walking, as the easiest type of physical activity for most people, could improve health if performed on regular basis (Haskell et al., 2007). Although personal factors affect walking, study shows that walking relates to the character of the actual and perceived physical environment (Hoehner, Brennan-Ramirez, Elliott, Handy, & Brownson, 2005).

We need evidence, through systematic study, on what makes a place walkable. For that, one must consider how to measure the environment. A systematic review of physical inventory reported as many as 20 major categories and 291 items (Nickelson, Wang, Mitchell, Hendricks, & Paschal, 2013). This leaves an important question: which of them capture attributes that affect people’s willingness to walk and how?

Much research on effects of physical environment on walking has relied on physical measures, such as land use, traffic levels, block size, connectivity, and amount of sidewalk infrastructure. Studies show major effects of aesthetics on walkability, but for policy those findings leave open the question of what properties of an environment make it aesthetically pleasing and desirable for walking. The present study sought to fill the gap.

Research on environmental preferences (aesthetics) has identified salient perceived attributes of the environment such as enclosure, order, complexity, naturalness, upkeep and found them related to aesthetic response (Nasar, 1998). To guide plans for walkable environments in terms of aesthetics, we need to know: 1) the cases in which the physical and perceived measures of the attributes overlap and 2) whether the aesthetic response to them translates into the willingness to walk.

Much of the research on walkability is correlational. Taking place in real world settings, it leaves many variables uncontrolled and cannot establish cause. To overcome these problems, the present research project first selected a pool of perceived attributes, salient in environmental perception, that also relate to aesthetic response and that might affect the willingness to walk. Then, the researcher conducted a survey to test the main effect of each attribute on willingness to walk. That study had participants view and respond to computer-generated color images showing different levels of each attribute. Some participants rated the images for the physically manipulated attribute and other rated the images for walkability. For the physical attributes that related to the perceived attributes and had the largest effect size on walkability, the researcher conducted a second study to test their main and interactive effects on the willingness to walk. The findings indicated that as expected walkability related to certain perceived “aesthetically pleasing” attributes and that in some cases there were interaction effects accentuating the positive effect.

The results provide insights into what physical and perceived attributes overlap, affect people’s willingness to walk and it reveals their relative importance. Future research could test the effects of manipulations of those attributes in real environments in different places and for different populations to see how well the lab findings generalize to real world conditions.

References

Outdoor signage is a critical element of communication in urban environments, providing for situational awareness or indexing of places within the physical environment; wayfinding or directional information; basic communication regarding activities on a site, products or services available on a site, or other types of information regarding observer interest in a site; and contributing to broader efforts at branding specific products or services (Bertucci & Crawford, 2011). The American Planning Association has encouraged planners “to think outside of the regulatory framework where signs are concerned and to approach signs as a positive design and communication element in their communities (Morris 2000, 2). Similarly, the APA has encouraged sign companies to work with planners as they seek to improve the built environment (Morris 2000, 3). So, while the importance of “well-designed” signage is widely recognized, there are few tools that either sign designers or planners use to objectively assist the sign design or regulation processes. This is especially important for complex urban environments where rarely does “one size fits all.” Signs designed or regulated for more general contexts may fail to capture the attention of the intended audience and therefore fail in its communication objective. The purpose of this presentation is to report on the use of web-based digital image analysis software and to explore its potential for planning education and research as a tool to assist both sign designers and city planners as they jointly seek to enhance the communication effective of signs while respecting local aesthetic sensibilities.

Faculty researchers and graduate students sought to build on the concepts of environmental signage communication introduced in Venturi and other’s (1977) to assess how varying urban environmental contexts affected the effectiveness of on-premise outdoor signs to capture the attention of an intended audience. To this end, 3M’s Visual Attention Software (VAS) was used to assess how design and environmental context combine to influence the “attention getting power” of representative on-premise commercial signage located in several of Cincinnati’s neighborhood business districts. VAS uses a predictive algorithm, based on eye-tracking studies, to test for the “pre-attentive vision” important for directing attention in the first 3-5 seconds of viewing (3M VAS 2015).

The signage evaluated ranged from traditional pole, wall, blade and window signs with varied lighting sources, including standard neon or back-lit image graphics, to contemporary electric message centers. Researcher sought to take into account the complexities of the environmental contexts, including the size, color and design of the signage, and the building milieu such as architectural style, building heights and conditions and setbacks, as well as franchise branding typologies. In addition, environmental features such as street trees and bushes, utility poles and wires, parked cars, trash cans, and public and private signage, all became part of the relevant environmental context. Photographs were taken from multiple perspectives and distances to capture the multiple perspectives from which a prospective customer of the businesses might be expected to view the signage. After the initial VAS analysis, Adobe Photoshop was used to attempt to increase each sign’s pre-
attentive vision while maintaining compliance with existing sign codes, and maintaining or enhancing a sign's graphic quality (based on qualitative assessment).

Preliminary findings indicate that the image analysis software serves as a useful tool for assisting both designers and planners. Designers can better understand the multiple contextual influences on the effectiveness of exterior on-premise signs and how to adjust standard designs to compensate for those contextual influences while still conforming to sign regulations. Planners can use the software to better understand how citywide sign regulations that work well in some contexts may limit sign effectiveness in others.

References

THE IMPACT OF TRANSIT-ORIENTED DEVELOPMENT ON SOCIAL CAPITAL
Abstract System ID#: 334
Individual Paper

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This paper focuses on the ability of Transit Oriented Development (TOD) to improve social bonds and interactions within a community. The expectation is that TOD has a positive impact on the lifestyle and activities of individuals, who reside, work, and frequent those locations. One potential way that a community may be affected is in how residents are engaged with their community; this is one element of what is commonly referred to as social capital. The definition of social capital has emerged as a concept that encompasses "social networks and the norms of reciprocity and trust to which to which those networks give rise." (Putnam 2001, Putnam & Sander 2010).

The key question this paper explores is whether TOD has a positive effect on community social capital. To address this question, this paper studies the effect of TOD on social capital by analyzing a 2012 survey of households in eight communities in New Jersey that are well-served by transit. The household survey focused on a large number of topics designed to assess or measure the benefits of TOD that have accrued to individuals and the communities in which they reside. Comprehensive in nature, the survey sought information on active and public transportation behaviors, commute and non-commute travel patterns, use of local amenities, personal health, and social interaction, in addition to collecting demographic data on the household.

The focus of this paper is an analysis of self-reported social capital variables. Our survey design allowed collection of data from households both near the transit station and up to about two miles distance from the station. We use Logit and Probit regression models to analysis the effect of TOD on previously validated social capital questions. We further test the relationship between social capital and TOD by creating a social capital index using questions from the survey. These questions inquire about respondents perceptions of neighborhood as a place to live, sense of community, knowing their neighbors, and trust. This index acts as a proxy for the “trust”, “safety”, “collective norms and values”, and “belonging” domains of social capital (Forrest and Kearns...
2001). Using this social capital index, we find statistical significant evidence of improved social capital for people living in TODs.

From a planning perspective, this paper’s finding of a positive relationship between TOD and social capital, adds to the growing literature on the benefits of TOD. Sander and Putnam (2010) put the need for social capital in the stark term that, “no democracy, and indeed no society, can be healthy without at least a modicum of this resource (social capital).” More concretely, social capital has been found to improve the health and happiness of citizens, reduce crime, improve governance, and improve economies (Sander & Putnam 2010).

References


Abstract Index #: 868
COMPREHENSIVE ASSESSMENT ON NEIGHBORHOOD DESIGN AND HOUSING PRICE: A META-ANALYSIS FOCUSING ON THE DEFINITION OF A NEIGHBORHOOD
Abstract System ID#: 411
Individual Paper

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Previous scholarly research has examined the impacts of neighborhood design elements on market prices for properties—a proxy of neighborhood satisfaction—while findings were inconsistent with each other. For instance, several researchers uncover that high density is likely to decrease the housing price (Geoghegan, Wainger, and Bockstael 1997; Song and Knaap 2003), but Tu and Eppli (1999) find that high density is a favorable condition in a neighborhood where new urbanism principles such as high density, mixed use, and better street connectivity were implemented. Similarly, mixed land uses are also good (Geoghegan, Wainger, and Bockstael 1997) or bad conditions on property value (Jones, Leishman, and MacDonald 2009; Geoghegan, Wainger, and Bockstael 1997). Two studies done by Song and Knapp find that mixed land use may or may not be a positive condition in increasing property value. They find that people are less willing to pay premiums for mixed land use (Song and Knapp 2003), but their follow-up work uncovers that certain types of land use is positively associated with neighborhood satisfaction, especially residential, commercial and public spaces Song and Knapp 2004). Another possible influence on housing premium turns out to be street connectivity. Similar to other design elements, having a better street connectivity could be positive (Song and Knapp 2004) or a negative impacts on housing price (Asabere 1990; Matthews and Turnbull 2007).

Results from these case-studies cannot pinpoint the impacts of neighborhood design on housing price. This is partially because of different study areas that have dissimilar planning policy, geography, or cultural and historical background. Data sources, measurement, or unit of analysis can be another reason. This study, however, highlights different operational definitions of “neighborhoods” adopted in previous studies. Researchers often use the same term neighborhood to refer to census geography, a buffer distance from an individual parcel, or other geographic units. Meanwhile, residents may respond differently to the different scales of neighborhood conditions. In order to account for this issue, our study seeks to generalize the impacts of neighborhood design elements defined by density, mixed land use, street pattern, and open space on housing
prices, using meta-analysis. In particular, neighborhoods that have been grouped according to their definitions will also be compared to each other. Forty-two previous published and unpublished works for a 25-year period from 1990 to 2015 are used for the analyses.

References


ENHANCING THE SOCIAL CAPITAL OF OPEN SPACE IN ABU DHABI

Urban designers and planners propose that open spaces between developments can greatly contribute to enhance the quality of life in several ways (Chienura, 2004). Several research studies have concluded that improving the quality of open space can lead to social, psychological, and environmental benefits (Coley et al., 1997; Sanchez, 2010). Therefore, well-planned open space can encourage the use of outdoor space, as a result advance social integration and interaction within the neighborhood. In addition, other socio-psychological studies have reported that the quality of open spaces can affect human psychology; it can reduce stress and aggression, and increase citizens’ performance and efficiency (Groenewegen, et al., 2006). Reintroducing nature to current urban setting adds aesthetic value to the space, as a result, generating attractive spaces that reflects the natural and historical aspects of the city which in turn enriches the economy and tourism benefiting both citizens and governments. However, the urban developments in the United Arab Emirates (UAE) keep open spaces free of any amenities when they can be re-planned in a way that advances the quality of the built environment.

This study analyzed open spaces in selected land-uses in Abu Dhabi. It targeted two types of land uses, low-density residential, and high-density mixed use neighborhoods. These kinds of developments are atypical in the mainland of the city of Abu Dhabi. Although open spaces have a potential to improve the social capital of the community, at present, they are under-utilized. Therefore, developing under-utilized spaces in these areas can resolve wide range of health-related problems. For instance, the US-UAE Business Council study (2014) indicates that 90 percent of deaths in the UAE are caused by sedentary, chronic lifestyle leading to non-communicable diseases like diabetes, cardio-vascular conditions, hypertension, and cancer. The improvement can result in enhanced social capital, engagement, interaction, connectivity, and walkability, in addition to providing several required and desired amenities for both residents and visitors to the area. In this study, several characteristics of open spaces were analyzed including sidewalks, setbacks between buildings, trees, recreational and retail activities, art and sculptures, and shaded versus uncovered area while controlling for land uses within the urban setting. The objective of this study was to understand people’s behavior in open spaces in and around their habitation, and inquire their preferences to provide design solution to improve the social capital of the open place.
This study was conducted in three phases. In the first phase, a photo analysis of present people’s behavioral activities and preferences in their context area was explored during different timings of the day including weekdays and weekends. In the second phase, surveys were distributed to the volunteers present at the context area in order to understand their immediate experience of the urban open space. The survey also inquired about their expectations and suggestions to improve the quality of the space. The response to their perception and expectations were combined with theories of open space design to provide a pragmatic urban design solutions that fits well within the cultural, social, and economic aspect of Abu Dhabi.

References

A COMPARATIVE STUDY OF CROSS-CULTURAL PERCEPTIONS AND PREFERENCES FOR RESIDENTIAL DENSITY PATTERNS AND SUSTAINABLE LIFESTYLE BETWEEN PEOPLE LIVING IN THE U.S AND CHINA

The concepts of density described or measured through several qualitative and quantitative methods usually are not identical. According to its definitions, crowding, physical density, social density, perceived density and others connect with different interpretations and applications. One way to distinguish these density types is based on the objective or subjective facts. The planning-oriented measurements (for example, dwelling units per acre) generally reflect the physical density, while the perceived density describes an individual’s perception of how crowded a given area is (Rapoport, 1975). Density also associates with environmental capacity, energy consumption and sustainability. Previous studies have indicated that perceptions of perceived density for various cultural groups are dissimilar (Rosenberg, 1968; Rapoport, 1977; Wohlwill, 1974; Wohlwill & Kohn, 1978; et al.). As compared to Americans, Asian people are more inclined to living in dense areas (Chan, 1999), but there is no solid evidence about how different they are, whether the gap has been narrowed for recent years, and what are the effects of sustainable lifestyle on their density choices.

This study sought to explore the features of preferred residential density between Americans and Chinese. It aimed to understand different types of residential density that were most favored by the two groups from three dimensions: housing, neighborhood or community, and relative location to city center (the densest urban area). There were 122 randomly contacted respondents from three Chinese national universities and 203 from the U.S. completing an online survey through instant messaging tools and ResearchMatch.org[1], including 218 females and 107 males, and their age range was from 19 to 40 with the average 28.5. (One of the recruitment criteria was living in their own countries for the lifetime.) Therefore, the study mainly provided the results of young generations without mixed cultural experience for the both countries.

Several statistical tests examined the preferences of the residential patterns, and linear regressions analyzed their relationships with living experience, family size, attitudes to the “low-carbon” lifestyle, and other demographic characteristics. The results showed that the two cultural groups overall shared very similar
preferences of density patterns that differing from the previous findings except for a few housing types, and the majority preferred relatively low density with gender differences instead of group differences. For both groups, if people claimed that they supported the “low-carbon lifestyle”, they also tended to prefer the high residential density. Chinese people lived in large cities generally preferred low-density residential patterns, but American people in rural areas preferred high-density residential patterns. In addition, American people have a relatively accurate sense of density as their self-reported preferred living densities were consistent with their rating scores for real patterns, but Chinese group did not.

Considering the preferred residential density through the capacity of buildings, number of neighbors, distance to the neighbors and public spaces, and energy conscious for different cultural groups could provide useful information for housing policies and design strategies. First, it helps to understand the heterogeneity of values or preferences for the two groups as well as their homogeneity. Second, as we have found that current experience affects people’s preference more than their previous experience for Americans, experiencing the new development projects with medium or high density could influence their attitudes to suburban life. Last, attitudes to sustainable life is not only reflected on people’s travel modes, but also on their favors of density.

[1] A national electronic, web-based recruitment tool funded in part by the NIH Clinical and Translational Science Award program. For details, see https://www.researchmatch.org

References


Abstract Index #: 871
SAFETY OF CHILDREN WALKING TO SCHOOL IN INNER CITY NEIGHBORHOODS: IMPLICATIONS FOR POLICY AND WALKABILITY AUDIT TOOLS
Abstract System ID#: 530
Individual Paper
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This paper will report the findings of a study currently underway examining the inner city children’s experience of walking to school. Under a grant from the Sol Price Center for Social Innovation, the study is conducted in City Heights, a low-income, multi-ethnic and working class neighborhood of San Diego. The objective of this study is to examine the major factors affecting the safety of children in their daily journeys between home and school. In this study, children are not only the subjects, but also active participants. Using a conceptual model of a child’s school travel, the project investigates the relative role of the built environment and social milieu in affecting children’s walking experience. The study involves about 150 fifth-graders from five elementary schools. It documents children’s walking experience and their perception of risks and hazards, supplemented by parent perceptions. The methodology includes both quantitative and qualitative tools using parent surveys, naturalistic field research, focus group interviews, and children-centered methods such as photo journal, cognitive mapping, travel diary, and focus group discussions. The findings of this research are expected to better inform current programs, identify areas that are perceived unsafe by children, and recommend interventions and social innovations in improving the safety of child pedestrians in general, and of children walking to school in particular. The paper will conclude with a broader discussion of the concept of “environmental press” as it pertains to the child user, and possible lacunae in the available walkability audit tools promoted by the public health community.
This research aims to explore how urban policies in particular zoning and design guidelines can mitigate or exacerbate heat in cities. My main research questions are: (1) how have different downtown development policies influenced their microclimates? And (2) to what extent are policies and codes (zoning and design guidelines) capable of mitigating urban heat through shaping the form elements in two different downtown neighborhoods in the Denver metro area?

Studies show that urban areas are about one to four degrees Celsius warmer than their surroundings (this varies during days and nights) (EPA, 2008). Considering that the IPCC (Intergovernmental Panel on Climate Change) (2013) projects that the global temperature will increase four to six degrees Celsius due to anthropogenic global warming by the end of this century, it is very likely that cities will experience more frequent and intense heat waves in the future. The literate shows that the effects of an urban heat on public health, environmental justice, energy and water consumption, and even social life of public spaces are significant (Harlan et al, 2008). Akbari et al (2005) found that electricity demand in cities increases by two to four percent (2-4%) for each 1°C increase in the temperature. In addition, over the last couple of decades, considerable mortalities are attributed to heat waves. For example, Stone (2012) argued that 70,000 deaths were attributed to the 2003 heat wave in Europe.

This raises the question whether current policies can address the urban heat issue properly at local level. There is a gap in planning and design theories and methods in addressing the role of urban codes and standards for heat mitigation. The majority of proposed heat mitigation strategies are focused on albedo and vegetation increase while the role of urban form and morphology are considerably neglected. My research has addressed this gap through exploring the policy implications of the ways urban form influences the microclimate of high density urban areas.

In order to answer the questions, I chose two downtown areas in the Denver metro area: downtown Denver and downtown Lakewood (Belmare). Two different development approaches in downtown Denver are applied. In the northern part of it (Lower Downtown or LoDo) a historical preservation approach is adopted. The southern part of downtown is heavily developed by high rise buildings. Belmare is a recently renewed downtown areas based on form-based codes (FBC) approach. Belmare offers a mixed use pattern with diverse housing and retail activities.
This research used a wide range of data including GIS datasets and surface temperature captured from satellite images. In order to map high temporal and spatial temperature data, I distributed 20 ambient temperature data loggers in these neighborhoods. I used a three-phased methodology. In the first phase, I analyzed, categorized, and coded the contents of policies and standards (zoning and design guidelines) in these areas to highlight standards that control the built environment features which can potentially influence urban microclimate. In the second phase, I compared these policies with the recently renewed or developed buildings to underline and track the effects of policies and codes on the form elements. In the third phase, I used the identified form elements including building envelope, building height-street width ratio, landscaping standards, and building roof and façade standards to simulate their roles in urban microclimate. Through the simulation and modeling of urban microclimate processes, I evaluated the role of policies and codes in driving microclimate variations.

The results show that policies made a significant difference in microclimate variations. FBCs in Belmar, has effectively created a lower and more comfortable temperature in the neighborhood and specifically in the public spaces. Historical downtown preservation policies also mitigated the temperature in some areas. However, the lack of landscaping standards were significant. In the southern part of downtown Denver, higher temperature were detected due to the built environment elements.

References


Abstract Index #: 873

A NEW BRAND OF SUBURBIA

Abstract System ID#: 585

Individual Paper

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The last decade has witnessed a growing presence of food in both academia and popular culture. Urban agriculture is widespread, as are CSAs (community supported agriculture), and a new awareness of food security in the works of Michael Pollan and documentaries such as Food, Inc. and Forks Over Knives. Planners and urban designers for their part are promoting walkability, New Urbanism, Green Urbanism and edible urban landscapes. Many are reassessing the role of cities, housing developments and urban lifestyles in ways that point towards compactness and free access. Despite this, new suburban developments continue to repeat the patterns of sprawl and tract housing. As a result, we are seeing food appropriated as part of a suburban agenda—while incorporating select principles of New Urbanism and food security. Widely known as agricultural urbanism or ‘agrihoods,’ these new suburban developments are marketed as combining walkability, community, local food and environmental sustainability. Upon further analysis however, these developments coincide with a splurge of suburban development in cities noted for sprawl (i.e. Phoenix, Atlanta), appear oriented towards affluent populations and do little to improve urban food security.

This study assesses six agrihoods across the US including Agritopia in Gilbert, Arizona (160 acres); South Village in South Burlington, Vermont (220 acres); Serenbe in Chattahoochee Hills, Georgia (1,000 acres with 224 existing
homes and 800 planned); Willowsford in Loudon County Virginia (2,130 single family homes); Harvest in Northlake, Texas (3,200 single family homes planned), and Rancho Mission Viejo in California (14,000 homes planned over the next two decades). All advocate preserved open space, agriculture, high quality design and a community-oriented lifestyle as foundations for their development.

We ask: are these developments the answer to ever growing food needs in today’s cities, or do they hijack the principles of food, urbanism and community in ways that will lead not to the claims they are marketing, but to tomorrow’s suburbia? We look at lifestyles, housing prices and property sizes, mission statements and demographics to assess the similarities and differences between existing agrihoods. Large-scale developments such as Willowsford may have few similarities to small-scale developments such as Agritopia, but as the involvement of developers increases, profit-driven decisions are likely to lead to more uniform projects. Finally, we discuss agrihoods future potential as either a benefit or detriment to the food movement, residential development and cities. In order to enhance food security, agrihoods should be providing sufficient food for all their residents to rely on, and not just supplement existing food offerings. Further, such developments should be available for those who most need healthy and affordable food: lower income, minorities and those living in food deserts. While agrihoods claim to fill this void, to date, nothing supports this assertion. This study fills this knowledge gap.

References

Legal Methods for Preserving Community Cultural Sign Heritage

Local sign ordinances are comprehensive. They regulate every aspect of signs, including: location, height, shape, lighting, and maintenance. They prescribe different regulations for on-premise and off-premise signs. Some ordinances ban certain types of signs, others provide for amortization or removal of non-conforming signs, and all ordinances require permits to display signs.

Many urban neighborhoods have a distinct socio-cultural identity that draws people and businesses to the cities in which they are located. City officials and boosters promote this aspect of their neighborhoods, seeking to appeal to visitors and prospective residents. In these culturally distinct neighborhoods, signs are a means of expression as well as an advertising medium, and are an important part of the cultural landscape of the community in the same way that buildings or businesses are.

Many sign codes are uniform across their jurisdictions, and provide no means for reflecting the “hyper-local” distinctions that are important to culturally distinct neighborhoods. Moreover, many local codes only allow modifications to signs if those modifications are in compliance with the code. And signs that do not conform to
the local sign code may be subject to amortized removal. As a result of rigid sign codes, amortized removal, and modification into uniformity, the part of a community’s cultural fabric that is expressed by its distinct signage is gradually eroding.

This paper will explore ways in which sign codes can be drafted or amended to address the need for flexibility that is essential to maintaining socio-cultural identity. With an emphasis on legal and constitutional considerations, the paper will review the array of available land use regulation techniques, and consider how those techniques may be applied to relieve sign codes of some of their unfortunate collateral damage.

References


Abstract Index #: 875

**DOES THE ENTROPY INDEX OF LAND USE MIX (LUM) POSITIVELY EFFECT PEDESTRIAN VOLUME?**

Abstract System ID#: 622
Individual Paper

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Jacobs (1961) emphasized land use mix in urban districts to improve walking environments with safety and vitality. Land use mix could reduce the trip distance to increase the equity for low income people who do not have enough money to trip and would be vulnerable to overweight and obese. The measurement and index of land use mix should be critical for urban design, urban planning, transportation planning, physical activity and health, etc.

Cervero (1989) initiated to use entropy score to describe land use mix of the suburban centers in United States and Cervero & Kockelman (1997) developed the entropy score for land use mix (LUM) as the standard form. Brown et al. (2009), however, pointed out the six limitation of the index by simulating different land use configurations. Recent empirical studies (ex, Yun & Choi, 2013) even showed the negative relationship between LUM and pedestrian volume.

This study would appropriate simulation to find the reasons of the limitation of LUM along with the possible conditions when the score could work or not. By developing more diverse experimental conditions of land use mix than Brown et al. (2009) did, the simulation would clearly show the restriction of LUM and find the specific situations when LUM is a reasonable score to make clear the relationship between land use mix and pedestrian volume. Residential, commercial, industrial, recreational and cultural land uses would generate different walking trips and not be the same destinations for pedestrians. Such different districts as commercial and/or residential in cities could result in diverse relationship between LUM and walking volume. Even urban and suburban areas as well as countries would affect the connection. While we tune the configurations of the uses and alter the pedestrian volume of unit area for the origination and destination trip of each land use, we would find the circumstance whether LUM explain pedestrian volume well or not. With the possible findings of this study further researches could use LUM in the proper setting to describe pedestrian volume and walking activity in different areas and countries.

References

Living with insecurity in the occupied Palestine continues to affect all aspects of everyday life. It hammers the quality of the individuals’ lives as much as it affects their environments. In a war zone, the meaning and impact of spatial justice and urban warfare is characterized not only in military strategies but also in creating a larger context of social inequality that is deeply contradictory and ambivalent. Confronting renewal struggle everyday nurtures people’s social bonds and strong connection to each other through bonds of kinship and friendship. Also, they often take pride in homes and spaces they have built, inherited used over generations. The uncertainties of daily experiences under the Israeli occupation consequences in tensions, but the inhabitants nevertheless experience their homes as a place of social intimacy. Thus, the social world of the home is both a place of danger and safety.

Drawing on ongoing ethnographic research from 2010 among Palestinians in the old town of Nablus and later in Jenin Refugee Camp whose homes were destroyed during the 2002 Israeli invasion, Edjteyah, this paper explicitly examines the impact of urban violence upon the physical and social meaning of home, resistance, and identity. This paper argues that the meaning and experience of military violence cannot be limited to the frameworks of its architects. Thus while the imposition of Israel’s assault on Nablus and the Jenin camp reflect a logic of urban warfare in the service of a ‘war on terror,’ Palestinians understood the event differently. In particular, they saw the violence of the Edjteyah as another step in the unfolding processes of an expansionist settler state committed to the erasure of Palestine and the Palestinians. Palestinians thus rejected Israel’s military logic of war by recasting the attack in nationalist terms that saw the destruction of the built environment as an existential matter. In this framework, the Edjteyah represented yet another effort by the Israeli state to annihilate the Palestinian people through the destruction of their material existence. Thus individual, national, and international acts of construction and reconstruction in Nablus and Jenin have constituted a fundamental act of affirmation and resistance in which the built environment is an extension of the Palestinian national body.

This paper begins with a critical analysis of the urbanization of warfare through the lens of Israel’s “walking through walls” policy in the Occupied West Bank. Moving beyond the logic of military planning, this paper situates Israel’s destruction of the built environment within the everyday experience of that violence among Palestinians. Particular focus is placed on its effects on the meaning and experience of home. It also examines how individual and community responses to the destruction are repositioned as acts of resistance and struggle that resonate with nationalist frames. More than a mere site of destruction/reconstruction, the built environment in this context is itself the object of struggle.
This study addresses regional disparities as a social equity issue. Since Japan now faces serious regional disparities by which the nation is divided into two sets of regions: flourishing metropolitan regions and diminishing local regions. Despite the persistent government policy to promote local regions, the situation has shown little signs of improvement. We argue that historic preservation could be an effective tool to cope with this problem and attempt to provide a practical case of Kaga Hashidate. Kaga Hashidate is located on the west coast of Ishikawa Prefecture and known for its historic buildings and environment. It was designated as a National Historic District in 2005 and has entered the 10th year. Its population has been stabilized and its living environment has been improved considerably.

Japan is a centralized nation as Tokyo has 29% of national population and its GDP surpasses that of Canada. After the WWII the growth of industries in metropolitan regions was pursued at the expense of migration from local regions which were regarded as a mere supplier of young labor force. As a result local regions have suffered from a loss of younger population, have faced aging population problems and have even suffered from fatal population loss in many small villages. This problem has been well known and discussed how to cope with it but no effective measures have evolved yet.

In the postwar period of Japan economic growth has been achieved with wooden houses being replaced by concrete buildings and automobile-based cities expanding outward. Through the process most metropolitan and fast growing regions on the Pacific Ocean side of Japan have lost historic environment and townscape. On the contrary local regions on the Japan Sea side and mountainous regions have seen much slower growth with their historic environment remained. They were once regarded as the backward regions as the nation enjoyed the fruits of economic growth. However, after the 1970's when Japan's rapid economic growth has slowed down and negative impacts of fast growth has been realized, historic heritages and traditional culture left in local regions have been realized as significant assets and areas with historic environment have become a desirable place to attract tourists and migrants from large cities. Therefore, historic preservation has emerged as a significant policy measures to promote local economy and hence to decrease regional disparities.

This study focuses on community development and vitalization efforts through historic preservation in Kaga-Hashidate and attempts to present (1) the achievements of historic preservation projects in 10 years, (2) the effects of community development by residents and university students, and (3) a prospect for historic preservation projects in Kaga Hashidate. Then, we argue that historic preservation is an effective alternative measures to revitalize local regions that suffer from regional disparities as historic districts with historic environment and townscape being a leading areas in coping with disparity issues.

References

This paper examines the relation between intangible collective goods and popular conceptions of public space through a case study of the recent redevelopment of Coney Island. In doing so, it explains a preservationist controversy that centered on private structures and spaces to which opponents of the redevelopment plan assigned a public dimension.

Coney Island, during the first half of the 20th century, was one of the most popular amusement destinations in the world, comprising an agglomeration of open amusement parks, arcades, and vendors, abutting a beach-front boardwalk. During the second half of the century, Coney Island’s popularity declined, and disinvestment left the area with numerous underutilized buildings and vacant lots. Although Coney Island has remained a beloved, affordable, and well-frequented place for recreation, these development opportunities eventually led the City to formulate a redevelopment plan that would change its zoning to allow higher densities and less restrictive uses.

The Coney Island redevelopment plan inspired opposition from advocates concerned that the proposed development would “privatize” the area. The City’s assurances of continued public access to the beach, the boardwalk, and the amusement grounds did nothing to allay these fears. My research shows that the advocates’ conception of public space exceeded the question of access and encompassed a quality of public interaction. Describing the erosion of the public sphere variously as a loss of “diversity” or “authenticity”, the advocates pointed to an essential Coney Island experience that depended on built structures and architectural features that the City’s plan either overlooked or regarded as liabilities. These findings shed light on the ways in which city planning struggles to address the complex relation between the form and function of the built environment. In so doing, they call for a more nuanced conception of public space and its relation to conventional redevelopment approaches.

References

Abstract Index #: 879
COMMUTER CORRIDOR REVITALIZATION
Abstract System ID#: 729
Poster

One of the important streets in Jackson, MS, which has a strong potential to become a “Complete Street”, is the “State Street”. The Public Transit in such a Commuter Corridor could be considered not only as an urban service for the commuters, but also as an asset to the city of Jackson and all its residents. For this purpose, the different elements and features of a Complete Street need to be wisely taken into account. The physical elements are sidewalk, bike path, public transit system (e.g. Bus Rapid Transit (BRT)), and also Transit-Oriented Developments (TOD).

The stretch, which is going to be considered in this project is from East County Line Rd. to somewhere close to the Interstate 20, so that most of the population who commute to downtown Jackson, will be able to make use of the system.
Next step is to analyze the current conditions and the city characteristic – with the help of some case studies all around the nation - in order to:
- Do the planning consideration, and BRT branding and marketing,
- Design running ways, stations, and stops (facilities),
- Understand the social, environmental, and economic impacts, and
- Plan for financing and implementing the proposed plan.

With these considerations and methodology, and also with the existing design criteria and guidelines, there will be a proposed model for the State Street in the mentioned stretch, focusing on two main TOD’s and some smaller stations.

It’s clear that there is not enough demand to implement such a system at the moment; the idea is to create that demand. So, the current data won’t support our proposal and therefore the approach would be proactive.

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THINKING OUTSIDE THE HALF-MILE CIRCLE: ESTABLISHING UPPER BOUNDS OF TRANSIT-SUPPORTIVE NEIGHBORHOODS

In both planning practice and research, it is a nearly accepted tenet that the one-half mile circle around a transit station serves as the upper limits for transit-oriented development (TOD) and ridership capture (Guerra, Cervero, and Tischler 2011). However, this is based primarily on walking distances and transit riders access stations using multiple modes, including bike and feeder transit. Some counter the half-mile is an over-estimation that does not reflect actual network-based walking distances, while others feel it is under-estimation when factors such as urban design, housing density, and employment density are considered (Canepa 2007).

A substantial body of literature exists regarding the price effects of light rail transit accessibility on residential properties. Findings indicate proximity to transit generally imparts a positive impact on the value of surrounding development (Bartholomew & Ewing 2011; Fogarty et al. 2008). However, discussion of the potential variations in TOD catchment areas by land use type, as well as station area type, is largely missing from the body of research evaluating light rail station areas. Additionally, few use market response of different property types to establish the upper bounds of transit-supportive neighborhoods, which extend beyond development in the core station area. As such, the implications these may have on land use and urban design policy for these broader transit-supportive areas are absent as well. This paper seeks to close some of these gaps in the research.

Urban design, surrounding land use context, and socio-economic factors such as income vary by station areas, affecting how much value proximity to a station imparts. Using a hedonic model and hierarchical linear modeling to capture these variations, we estimate the association between TRAX, the light rail system serving Salt Lake County, Utah, and the value of different residential property types. We present findings on single-family detached, single-family attached, and multi-family dwellings.
Controlling for structural, neighborhood, and location characteristics, our preliminary results suggest the area of influence for light stations extends out to one and one-quarter miles, with value varying by residential property type. These results indicate a need for comprehensively addressing the design and planning of transit-supportive neighborhoods, rather than just station area TOD. Beyond land use regulations, planners must consider urban design elements such as streetscape, building form and function, and parking standards, as well as linkages to bike routes, feeder transit, and open space networks to facilitate effective transit-supportive neighborhoods.

References

Abstract Index #: 881
THE DESIGN MOMENT MISSED IN KANSAS CITY: BUILT FORM ON AN URBAN CORRIDOR
Abstract System ID#: 815
Individual Paper
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Cities rarely undergo systematic changes in built form. Instead year-by-year changes are more organic. Kostof (1992) notes “cities are caught between a balancing act between destruction and preservation. As long as the management of the balance has not been formalized, citizens will seek their own advantage within a loose frame of social and economic forces” (290). In sharp contrast, design moments are those times of planned expansion and redevelopment decisions that frame the later periods of organic growth. These moments are driven by large scale socio-political forces and include policies of nation-building and urban renewal, responses to natural disasters and war reconstruction, as well as adoption of new technologies such as electricity, the railroad, and the automobile (Wagner and Frisch 2012). To understand a city and its form, one must uncover the design moments of the past. What exists today is the result of organic growth decisions made within this frame.

I apply an analysis of Kansas City design moments to explain the existing built form on the Broadway corridor in Central Kansas City. Some of these design moments have been well documented. The Broadway corridor began as part of the city beautiful era Parks and Boulevards plan. Broadway today is a commercial corridor, and its form and design contradict its origin. Later design moments then explain this transition. Gotham shows how the combination of racial segregation, real estate development and expressway planning led to metropolitan sprawl in Kansas City (2014). While Gotham’s broad frame explains the overall policy trend, other design moments reflected in city plans, explain the resultant form. Using a parcel-by-parcel analysis, I relate existing form to an underlying explanatory frame referencing a large scale urban process.

The design moment analysis shows that existing conditions on Broadway were the result of planned de-population. While large scale racial policies of school segregation and expressway building may explain the overall development of Kansas City, Broadway’s current condition is just as much a result of changes in planning and land use regulations as applied to the parcel scale. The analysis illustrate how political economic decisions made within an urban regime may be read as patterns in the built form of the corridor (Kostof 1991). This result supports Gundar’s (2011) proposition that urban design is still very much within urban planning.
References


Abstract Index #: 882
**RETHINKING HOUSING: THE CHALLENGE OF URBANISM IN ASIAN-MEGACITIES**

Abstract System ID#: 827
Roundtable or Informal Discussion Session

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With their urban populations soaring, Asian mega-cities are rapidly expanding their housing stock. However, much of this housing takes on repetitive urban forms — typically cruciform-shaped towers placed in a park or on top of a podium-mall — with little consideration to place-making. Much of this housing is governed by reductive national laws and embedded policies that restrict design alternatives and contribute to design homogeneity. These regulations prioritize housing unit standards and exposure to environmental amenities but ignore other normative urban design values such as city image, orientation, sustainability, and livability. How might the mass production of housing be reformed or improved to generate better urbanism without resorting to historicism or reducing housing production for populations in need? This panel discusses the urbanism of Asian’s residential estates and explores how they could contribute to making unique urban places.

Abstract Index #: 883
**SUSTAINING COMMUNITIES THROUGH HAPPINESS**

Abstract System ID#: 858
Individual Paper

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Happiness is commonly thought of as an individual characteristic for which a person is solely responsible. However, happiness is also a community characteristic influenced by factors external to the individual (Balducci & Checci, 2009; Welsch, 2006). This paper sets the context for community level happiness as an alternative objective for sustainable community development and planning. First, a review of historical and current sustainable development frameworks is performed, including strengths and limitations of each. Community planning and development has flirted on the edge of happy neighborhoods but a more focused approach could be the key to a refined framework. Next, the Sustainability Through Happiness Framework (STHF) is detailed as a conceptual path for sustainable community development. To move toward a sustainable future, we need to actively participate in happiness visioning, engage project participants (e.g. residents, stakeholders, from all walks of life, culture, status and beliefs), inventory happiness profits, use systems planning and sustainability interventions. Finally, the paper concludes with the benefits and challenges of a framework focused on happiness. Ultimately, happiness offers a universal measure focused on the quality of human life and a community development framework that may translate to a sustainable future.
Urban residents value different forms of pop up and informal urbanism. Food trucks, temporary art installations, street art and parades help create dynamic urban environments (Franck and Stevens, 2007). Yet, a desire for more public activity and a revitalized urban core has been accompanied by close scrutiny to and tensions over activities such as street vending and busking. In response, local governments have revised regulations governing public space uses, but these ordinances change rather than reduce barriers to street use. In doing so, they have privileged the interests of more influential new street users over those who have been operating informally (Martin, 2014). Although urban design scholars and practitioners have demanded better public space design with the intent to create people-oriented public spaces (Carmona et al, 2010), too little attention has been paid to redesigning ordinary streets to accommodate a wide range of daily activities (Ehrenfeucht and Loukaitou-Sideris, 2010).

This paper investigates street vending, a phenomenon that has operated informally in U.S. cities for decades. In the last ten years, a growing industry of food truck operators has demanded permission to operate on U.S. streets. This led to new regulatory initiatives that focus attention on food trucks as well as other types of street vending. This paper investigates how two public space planning techniques, street design and public space regulation, influence how public space activities unfold. This paper will address the following questions: How does street design influence street vending and the interactions with other street users? How does the regulatory structure influence street vending and the interaction with other street users? Chicago and New Orleans are two cities that reformed their street food vending regulations in the 2010s. This paper draws on two field research projects, one that observed food trucks operating in the Chicago Loop in fall 2013 and a second that observed food vendors operating at second lines—a Sunday parading tradition that occurs throughout much of the year—in New Orleans during 2014-2015, along with an analysis of the ordinances governing public space use. Findings from these projects indicate that small urban spaces can create sites where activities occur with minimum impact on activities such as walking. In addition, vendors, customers and other public space users exhibit a tendency to self organization and an ability adapt to local conditions, confirming other research showing self organization in public space (e.g., Morales, 2010).

This paper has relevance for planning practice and theory. As cities strive to accommodate more activities, close attention to how public activities play out shows how design interventions can reduce conflicts and facilitate layered public space uses as well as better ensure regulations meet intended objectives. These research projects also examines a process of re-formalization of informal activities that has been occurring as urban residents have sought more dynamic public spaces. Although some food vendors have demanded legitimacy in the form of permits, the structure of permits privileges certain users at the expense of others and impedes activities of street food vendors who continue to work informally. The food vending regulations also continue to privilege stationary businesses and create restrictive regulations that run counter to ongoing vending practices. As a result, regulation has had the paradoxical effect of making vending harder for some vendors who operated without permits prior to the new era of legitimacy. This research suggests the possibility for urban design and self regulation to address public space concerns in ways that counter the disparate impacts of regulation as a technique to legitimize informal activities.
Urban planners work to ensure that housing of the necessary types and quantities can be produced in their cities, using zoning, development standards, design review and other tools to balance housing preferences with community need. These policies literally shape housing, both as physical forms and as financial investments, but most do not take design and development drivers into account (Carmona 2001, Talen 2012). Resulting disconnects can skew housing production and result in less desirable housing types. Frameworks that bring planning, design and development perspectives into relation and identify and characterize the impact of planning policy on design and development outcomes have the potential to improve housing production from all three points of view.

To create these types of resources, I performed a cross-disciplinary analysis of significant Los Angeles housing design precedents and their related development types, all approved either by-right or by-variance by urban planners. Though the projects studied have similar physical characteristics and are located in close proximity to one another, professionals involved in housing production rarely look at them side-by-side. Consequently, these development type vs. design precedent pairings are usually viewed by those in the industry as maximally different, i.e., they assume that if projects excel from the point of view of one field they necessarily fail from the perspective of others. This paper examines whether this perceived divergence is actually the case and asks what can be learned from looking at these works comparatively rather than in isolation: (1) Do the planning policies that shaped these projects support good design and profitable development? (2) Do the exceptions they were granted from planning regulations create design and development value? (3) Do these projects employ strategies that are beneficial from more than one disciplinary perspective that could be used to improve housing outcomes from all points of view?

This paper presents a comparative case study of the National Boulevard Apartments, designed and developed by architect Raymond Kappe, and the developer-built apartment building directly across the street (Kappe 1995). Both are hybrid types constructed in the mid-1950s as Los Angeles builders were struggling to adapt existing housing models to the increased allowable density and stricter development standards contained in the city’s still-new 1946 zoning code. In this case, good market fundamentals coupled with difficult hillside sites, spurred the transition from Courtyard Garden Apartments (repetitive low-rise buildings grouped around landscaped courtyards) to Dingbat Apartments (low-rise “stucco box” structures organized around parking and car access). Dingbats were mass-produced across large swaths of the LA Basin from the late 1950s through the 1970s, addressing significant housing demand, but without the character, amenity and intimate scale of earlier housing types (Chase 2000).
The introduction of Los Angeles’ 1946 zoning code made tested building types more challenging to build, and made it difficult to transition these known types to higher densities. Consequently, new housing models such as the Dingbat were used, models that arguably provided less quality of life for residents and which are now less valued. Close analysis of the case study, though, suggests that it didn’t have to be this way. Research is ongoing, but, the cross-disciplinary strategies demonstrated by both subjects, i.e., strategies that simultaneously support urban planning, design and development goals, identify ways in which the code could have encouraged the translation of the desirable qualities of known housing types into new forms more suitable to the city’s future needs.

References

Abstract Index #: 886
TOWARDS A RECONCEPTUALIZATION OF THE ‘EVERYDAY’ IN URBAN PLANNING AND DESIGN DISCOURSE
Abstract System ID#: 978
Individual Paper
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The ‘everyday’ has become a touchstone in urban planning and design discourse (Caulfield, 1994; Chase, et al. 1999; and Dell and Ghose, 2009). We, however, contend that there is an inadequate theorization of the everyday in urban planning and design discourse that results in a trivialization of the concept and a loss of its value as an analytic category. As currently deployed in the urban planning and design literature, the everyday is frequently conceptualized not as the processes by which the ordinary material world of marginalized peoples are transformed, but instead a system employed by elites to mark the everyday as a world of significant symbols. The outside elites assign meaning and value to the everyday. In its fetishization of the ordinary, the discourse creates a false contrast between the consumptive and inauthentic landscapes of global capital and the authenticity of “everyday life” in underprivileged communities. The ideology of the everyday is based on a fallacy, which views the processes such environments come about as independent of the material conditions of the systems that produce them. Conceptually, it adds little to urban planning and design practice and thought because it fails to further our understanding of the materializations and practices out of which the everyday emerges. Rather, the discourse functions to institutionalize and mystify by suppressing the materiality and contingency of the quotidian experience it claims to celebrate. We argue that this reification of the ‘everyday’ that naturalizes in urban planning and design discourse, and the socio-political and the empirical dimensions of a process driven by the logics that inform capitalist spatial production and reproduction must be challenged.

This paper draws on an analysis of two Latino business districts, La villita in Chicago and the “Italian” Market (which is now really a Mexican Market) in Philadelphia in the context of the “critique of everyday life” derived from Marxist critique of commodity fetishism and reification. The hope is to develop alternative epistemologies and methodologies for querying the everyday. If the concept of everyday life is to advance reflective practice, then urban planners and designers need to give more thought to how the concept is used in urban planning and design discourse. The idea is to avoid the tendency “to naturalize or reify its theoretical objects.” We conclude that the myth of everyday life should be reconceptualized to illuminate its underbelly-- the embedded inner structure of the capitalist system that is often mystified by a failure to forge a link between an aesthetic-descriptive analysis and radical critique.
The obsolete waterfront industrial landscape has been the fulcrum of large-scale restructuring and urban redevelopment efforts in cities like New York, Barcelona, London and also Philadelphia (Desfor, Laidley, Stevens and Schubert 2011). Through an analysis of the pop up urban landscapes on the Philadelphia Waterfront, this paper examines how entrepreneurial urban actors, such as municipal officials, urban planning agencies and landscape designers, strategically harness the “urban tactics” (De Certeau 1990) deployed in one’s everyday life. We argue that it uses and materializes innovative (re)actions meant to evade the penetration of market-relations in order to reanimate and revalorize “obsolete” urban landscapes. This paper is grounded in a qualitative analysis of Philadelphia’s waterfront and pop-up projects based on interviews (including photographic ones), official plans and reports, as well as web-based marketing or advocacy materials.

The spatial interstices that vacant land on industrial waterfronts present, afford planners and urban designers the opportunity to experiment with new uses, to test design ideas and techniques and to harness entrepreneurial energy to catalyze economic activity. Yet, the reclaimation of vacant land by local residents, especially in neighborhoods that suffered targeted disinvestment, to create social, expressive, and political spaces, such as community gardens, has its origins in the struggle to forge a sense of collective identity and “community empowerment” (Schmelzkopf 2002). These spaces retained “use value” in the urban landscape (Cummings 2001). Nonetheless, these contested spaces form part of the “informal city” and are conceptualized as ephemeral and transitory (Demisi 2015); they exist only as long as they remain invisible to real estate capital and entrepreneurial actors, able to envision and realize exchange value from these spaces. Landscape design in coordination with new urban renewal/redevelopment plans, such as the Philadelphia pop-ups on the waterfront, we argue, appropriate, formalize and commodify informal urban practices through which individual as well as organized groups have sought to carve out social and expressive (affective) spaces in their urban neighborhoods. The notion of “community development,” which resonates as a politically progressive term, in this case, acts as a euphemism for the creation of profit through revalorization of land and real estate. These form of strategic interventions to redevelop urban assets, like waterfronts, needs to be addressed and assessed especially in the urban planning field as it undermines equity and social justice in the city (Fainstein 2010). More perniciously, in homing in on precisely those instances of “resistance” and making visible our individual and collective creativity and inclination to try to evade capital’s colonization of our everyday, these “alternative” countercultural “progressive political values” are precisely instrumentalized to add value to urban space (land).
Correctly voiced by sustainability advocates and the sustainability press, social sustainability is the least understood and the least operational of sustainability theory’s three legged stool that includes environmental and economic foci. Environmental sustainability has long been the leader in grabbing attention and helping to reshape the practice of the built environment professions. In the United States, both economic and social sustainability have been laggards in focusing attention on those two other legs, compared to the sustainability agendas found in Europe, Canada and Australia. The social democracies and the welfare state systems common throughout Europe have helped usher in economic sustainability agendas and the operationalization of associated practices that seek to provide economic well-being for future generations. Programs associated with an economic sustainability agenda include: improving access to housing and housing finance, wealth redistribution programs and the evolution of the welfare state, economic development practices, and re-education/vocational education to create greater levels of human capital. Not surprising then, the last of the sustainability triumvirate to receive attention was social sustainability.

Early conceptions of social sustainability included ideas about: social cohesion, social reproduction, community stability and succession, community development, socially relevant placemaking, and quality of life concerns that make places livable. More recently, the UK and Australia have led the way in firming up relative definitions of social sustainability and elucidating a social sustainability agenda related to the built environment. This paper will utilize the definition of social sustainability, and its relation to the built environment, offered up by a British social organization called: Social Life. This definition (with its four part framework) will be utilized then as a means of categorizing social sustainability components in the built environment, and assessing the potential for a social sustainability agenda for US cities and neighborhoods based on this definition. The author expects the research to show that a revised definition of social sustainability may be timely to accurately gauge the social sustainability needs of people in US cities, as different cultures of spatial practice and everyday life distinguish life in the UK and life in the US. But even more probable is a differentiated operationalization of social sustainability practice in the built environment to reflect these lifestyle differences, as well as differences in morphology, built quality, and absence of social space in the US city. This follows recent theory on differential planning culture, and the newly emerging theory of differential design culture between nations.

For Social Life, social sustainability is "a process for creating sustainable, successful places that promote wellbeing, by understanding what people need from the places they live and work. Social sustainability combines design of the physical realm with design of the social world – infrastructure to support social and cultural life, social amenities, systems for citizen engagement and space for people and places to evolve." These four categories will be used to identify case study exemplars around which a grounded theory of urban design practice for social sustainability can emerge with respect to US lifestyles, cities, and neighborhoods. The four categories are: 1. Infrastructure and amenities to support social and cultural life; 2. Spaces and rituals for social and cultural life; 3. Spaces and processes of voice and influence; and 4. Spaces where communities can evolve and grow.
Through matching exemplar cases to these categories, the author expects an emergent grounded theory of America-based socially sustainable urban design practice, as well as a platform for the continued evolution of urban design practice.

References


Abstract Index #: 889

**URBAN GROWTH AND HUMAN DECAY: EXAMINING RELATIONSHIPS BETWEEN EXPANDING CITIES AND BURIAL PRACTICE IN CENTRAL TEXAS**

Abstract System ID#: 1130

Individual Paper

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Cemeteries in Central Texas lack sufficient space to dispose of existing residents once they die. As urban growth has rendered these cemeteries landlocked and unable to expand, traditional burial practices stress the cemeteries’ limited capacity, consume material resources, detach the body from the nutrient cycle, and potentially contaminate groundwater and soil with embalming fluids. As plots in cemeteries within larger cities decrease in number and increase in cost, individuals from larger metropolitan areas purchase less expensive plots in smaller towns. These purchases contribute to the lack of disposition or burial space at a regional scale; and force smaller municipalities to impose restrictions on plot sales and request land donations to develop and expand their cemetery network. The projected doubling of the region’s population by 2050 ensures further strain to an already deficient cemetery network. Utilizing Science and Technology Studies (STS) and Urban Political Ecology frameworks, this paper examines relationships between dynamic urban growth and the cemetery’s social, technical, and biophysical processes within Central Texas. Proposing the cemetery as a technology, the paper will utilize geospatial analysis, interviews, and a review of obdurate land use policies and burial practices to illustrate challenges facing cemetery design.

References


Abstract Index #: 890

**NEIGHBORHOOD SIGNS AS SYMBOLS OF PLACE IDENTITY: A SOCIO-CULTURAL-POLITICAL TAXONOMY OF SIGNS**

Abstract System ID#: 1191

Pre-organized Session: Signs as Symbols of Cultural Landscape
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Signs are an important component of a place-based communication system. Signs contribute significantly to the experience of place, particularly commercial space such as the neighborhood main street. Beyond their commercial or regulatory and sensory visual value, signs are symbols: they communicate socio-cultural and even political messages. Signs quintessentially represent and mediate between, what Zukin (1991) calls the visual economy of the landscape and market culture. Signs act as material traces that provide a direct spatial semiotic—a visual sociology of place (Krase and Shortell, 2011). Thus, we can read a place by reading the signs in the place.

The purpose of the paper is twofold. The main goal is to develop a socio-cultural-political taxonomy of signs but as a corollary we also want to test the hypothesis that the signs on the neighborhood’s commercial streets (or other commercial space) represent the neighborhood’s socio-cultural and political character, social practices and collective identity.

We first develop a theory and present a classification of signs into a 16-part taxonomy of socio-cultural-political constructs that is reflective of the social, cultural and political messages generated and promoted by the signs on the main street. The taxonomy acts as a medium for a spatial semiotic analysis to understand the neighborhood’s character, social practices and collective identity.

Next, the research employs a mixed method approach that combines visual documentation and qualitative visual analysis with surveys. We apply the 16-part taxonomy for a reading of the neighborhood to three socio-economically varied neighborhood commercial streets in Cincinnati, OH. Through a visual analysis of the signs we determine the social practices and collective identity of each neighborhood. Next, we survey residents and workers in these neighborhoods and another general sample of the non-residential population of these neighborhoods to determine how accurately the taxonomy of signs represents the character, social practices and collective identity of each neighborhood.

Although the research is ongoing our preliminary findings reveal that by looking at signs through the proposed taxonomy one can really read the neighborhood by reading the signs in the neighborhood. Testing our hypotheses, preliminary surveys indicate two things, first, that signs act as powerful communication systems for relaying and representing community social practices, and second, that signs reveal collective identities rather than a singular collective identity for the neighborhood. But perhaps more importantly, we are finding that the reading of neighborhood signs via the taxonomy has numerous other benefits for urban designers and planners. This reading elevates the understanding of the neighborhood beyond mere visual and sensory aspects (that occurs as a first reading of signs) to the more meaningful understanding of strengths and needs of neighborhoods. The taxonomy acts as a powerful evaluative tool that represents the neighborhood’s place identity by revealing aspects of power, cohesion, diversity, education and economy.

References

Abstract Index #: 891
MINDING THE GAP: URBAN DESIGN LESSONS FROM THE LOS ANGELES 30-YEAR TRANSPORTATION PLAN
Abstract System ID#: 1228
Individual Paper

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Beginning in 2008, Los Angeles embarked on a 30-year plan to reinvent public transportation within the region by doubling the number of stations and miles of track in the public transit rail system. This nascent system, currently composed of light and heavy-rail lines radiating from a downtown node, is planned to serve the entire region by the end of those three decades. The Los Angeles County Metropolitan Transportation Authority (LA Metro) recognizes three main phases in the design and implementation of new lines and stations: Planning, Design, and Construction. LA Metro takes responsibility for planning and construction, but design falls to the city that the station and line pass through. This is the GAP, a lack of design oversight by Metro at the crucial middle section of the project, where urban design visioning and decision fall to many different entities at the municipal level. This presentation problematizes the different approaches and strategies layered into this process by examining the Leimert Park neighborhood, a historic Olmsted-designed community that successfully advocated for a rail-transit stop in their neighborhood. Using extensive survey, interview, and morphological data, this presentation will present one example of current urban design strategies and successes and failures in a contemporary metropolis engaged in a new iteration of infrastructure investment, an iteration that many cities are dealing with. The GAP creates a unique window for exploring and evaluating a range of responses across a shared landscape of investment.

References
Located in the most densely urbanized sub-basin in the Great Lakes system, the cities of Cleveland and Detroit are paradigmatic cases of Rust Belt Urbanism. Reporting a sustained population loss since the 1960s, these urban landscapes currently display an excess of vacant land, unevenly interspersed between residential neighborhoods and outdated industrial and commercial corridors. Over time, the population contraction translated into a shrinking tax base, and maintaining the obsolete infrastructural systems built to serve a much larger constituency has become more challenging. The case of water and sewage infrastructure illustrates this legacy. In the two cities under consideration, the infrastructure systems go far beyond the municipal boundary to serve an ever-growing suburban population. During high-precipitation events, the combined sewers are already full when they reach the city boundaries, causing the system’s failure, and releasing untreated water into the urban rivers.

Led by the Environmental Protection Agency’s mandate to reduce water pollution, the two cities are adopting green over grey infrastructure approaches to reduce storm water runoff entering in the combined sewer systems (Olin and Project Clean Lake, 2012). These initiatives offer an opportunity to repurpose vacant land as green and blue infrastructure, improving water quality through better management of storm water flows (Desimini, 2014). Advancing this agenda, new collaborative frameworks are emerging in these cities, offering an alternative to traditional infrastructure governance. The scope, extent and ambition of the current initiatives vary in each city, opening up many questions regarding scale, continuity, implementation and maintenance of the projects. Ranging from strategies at the metropolitan scale, to tactics that reclaim a vacant residential lot at a time, the effort to reintroduce performance-biased landscapes is building a new land stewardship agenda that represents a fertile ground for design innovation. Still in the very early stages of development, much of the work under development is more concerned with setting performative standards for these landscapes than giving legibility to the cultural aspects of these infrastructural landscapes.

Using a comparative case study approach among these cities, this investigation outlines the different initiatives advancing the reuse of vacant land as blue infrastructure, and examines the partnerships between municipal governments, land banks, water utilities, philanthropies and other local non-profits involved. Adding to this large matrix of actors, the complex financial structures required to move the projects forward spark novel partnerships that challenge old models of single expertise and mono-functionality. The hybrid nature of these landscapes, as environmental and civic infrastructure, also participates in contemporary debates looking at decentralized and multifunctional infrastructures (Green and Blue Infrastructure, Detroit Future City Framework, 2013) as an emerging paradigm for long-term declining North-American legacy cities.

This paper discusses three main issues:

1) the ongoing green and blue infrastructure initiatives in Detroit and Cleveland, as relevant cases of study in the post-industrial legacy of the Rust Belt cities.
2) the current institutional landscape enabling the strategies of urban re-naturalization, and the agents involved in the implementation and maintenance; and
3) the resulting infrastructural landscapes, their social acceptance and contribution to a new urban identity.

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VERNACULAR LANDSCAPES: A SUSTAINABLE SOLUTION TO CHANGE?

Abstract Index #: 1272
Individual Paper

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Outside the cities of Greece, and particularly on the islands, both the remnants of and the lingering use of traditional landscape management that has evolved over 4000 years, still shapes the identity and livelihoods of many people. But these landscapes and the knowledge that has been handed down have been under threat for more than 30 years. Modernization, reliance on a tourism economy, and shifting regional land management and governance schemes have disregarded and conflicted with the traditional landscape. Evidence shows that the traditional practices were more in harmony with nature and social equity, and the shifts to modern ways have exacerbated environmental problems, negatively impacted quality of life, and have marginalized portions of the population. My case study focuses on the landscapes of Santorini and Crete, where I have been observing, documenting and analyzing the traditional landscapes for over ten years. This paper documents the sustainability characteristics of the key traditional landscapes management practices on Santorini and in the Langada Valley of Crete; explores the connections of this landscape with the people that still rely on it; analyzes the political economy of the threat to this landscape; and offers insights for a more sustainable transition.

References


EVOLUTION OF PRE-MODERN URBAN SPATIAL FORM: A CASE STUDY OF THE SHANGHAI FRENCH CONCESSION DURING 1849-1943

Abstract Index #: 1293
Individual Paper

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Pre-modern China left behind a rich legacy of urban space, but the existing transformation models of old city ignore and even destroy its urban dynamic and diversity. Pre-modern urban space systematically reflects a variety of modern urban spatial types and their integrated evolution model with specific Chinese characteristics,
and therefore the relevant studies provide references to current planning and design of historic neighborhoods redevelopment. Based on complex system theory and the methodology of urban morphology, this paper will analyze multi-phase and multi-scale space evolution of pre-modern urban spatial form.

The paper will 1) build a theoretical model for pre-modern urban spatial form evolution and propose an analytical framework of spatial form evolution at different phases and scales, 2) conduct an empirical study of pre-modern Shanghai French Concession based on the GIS database of pre-modern Shanghai historic neighborhoods established by the applicant. A typology of spatial form at three scales, including parcel, neighborhood and urban area will be identified, as well as their multiple features. The interaction among space of different scale at different phase will be explored through cluster analysis, and then the model of spatial form evolution will be built; 3) investigate a joint mechanism with planning and design of historic neighborhoods’ redevelopment. The spatial forms worth of preserving will be identified and the standard of choosing regeneration parcels will be established. It is followed by an exploration of multiple possibilities to restructure historic urban space.

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Abstract Index #: 896
THE NEW ORLEANS DESIGN MOMENT REVISITED
Abstract System ID#: 1317
Individual Paper

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Following Hurricane Katrina, the city of New Orleans became a “testing ground” for various planning and policy agendas: public school reform, the demolition and re-design of public housing, environmental planning in the context of global climate change, and various schemes to “rethink” multiple components of the city’s urban design framework - from “flood proof” housing designs to the New Urbanist initiative to demolish the inner-city highway through Treme. Wagner and Frisch (2009) defined this “design moment” process as a critical juncture in the city’s history.

In this paper, the author revisits the concept of the “design moment” in New Orleans and its repercussions for planning and urban design beyond New Orleans. Based on applied planning research in Kansas City and reflection on the New Orleans experience, the paper addresses the underlying political coalitions that organize around specific efforts to reframe and transform the social space of the city. The myriad concepts - big and small - to redesign the city are contrasted with the actual recovery process on the ground and what projects were completed.

Following this section of the paper, a second part examines the influence of the New Orleans design moment experience on other cities. Using a case study of the Make It Right Foundation’s work in one Kansas City neighborhood, the paper reflects on the process of planners and designers who worked in New Orleans following the disaster and how they have applied that experience to other places. In particular - this section addresses the question - how did the New Orleans design moment influence planning beyond New Orleans?
Resilience has been frequently debated in recent years in the fields of architecture, urban design, planning, and other related disciplines. Detroit is among many cities that are mentioned as cities of resilience by a growing number of scholars, policymakers, practitioners, and community groups. Among many facets of resilience, this study focuses on a potential link between placemaking-based art and resilience in low income urban communities. Studies suggest that some art and gardens have therapeutic and healing effects on patients. Empirical research on the impact of placemaking-based art on resilience, however, is scant. This is an important area of research, especially for postindustrial cities like Detroit, which need a resilient “bounce-back” from shrinkage, in the setting of growing attention to power of art and placemaking.

This pilot study uses an in-depth literature review and case studies to support the arguments that art can play an important role in placemaking, and that placemaking-based artwork can in turn build resilience, especially in the context of disadvantaged urban areas.

This study also uses the results of interviews, survey questionnaires, and field observations in Detroit’s underserved areas to verify lessons learned from the literature review, and examine whether or not there is any positive relationship or correlation between art and placemaking, and also between placemaking-conducive art activities and resilient behaviors.

The preliminary study results suggest that while placemaking art is likely to foster resilience, the locations, types of art, and operationalization of resilience could influence research outcomes. Nevertheless, this pilot study, by proposing a conceptual framework, is an important first step toward a more robust model. It will also help develop more rigorous research agendas for resilience, which is arguably one of the most important topics in the post-industrial era.

References


**WHAT TIME IS THIS PLACE NOW?**
Abstract System ID#: 1362
Individual Paper

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This paper revisits Kevin Lynch’s What time is this place? 1972 book to shed light on increasing social needs for stronger groundings in time (in addition to place) and to support planning efforts hindered by change-adverse environments. Lynch’s book is a reflection on the image of time in the city – essential to human wellbeing and effective action- and on public institutions and planners’ roles in the management of images of time as an intrinsic element of the urban environment (planning interventions can visibly connect past and future, support public perceptions of change, provide options for how individuals experience time etc.).

My discussion starts with a theoretical overview of time in the modern era. I ground my work on Kant’s philosophical reflections on time as a precondition for all phenomena and Hegel views on the importance of historical records to situate the present. I then focus on the modern era, with Taylor’s use of time for productivity maximization and Lewis Mumford’s reflection on the clock as “the key machine of the modern industrial age” marking a modern form of servitude for workers.

Transitioning to the current era, I discuss Jay Griffith’s work on time as a high stakes political notion—highlighting in this context the radical act of William’s Faulkner’s destruction of a watch. Next, I discuss the social impact of our relation to time in the context of three distinct phenomena. First, time, not perceived but counted by clocks and schedules, is omnipresent and unavoidable in the urban landscape and on our bodies (watches, cell phones etc). Second, with the advent of information technologies, historical times are becoming as abridged as space is becoming reduced (Marshall Mc Luhan). Third, urban change in US cities is often so total that we don’t remember or keep track of what preexisted change. E.g., while the Rurh region of Germany is preserving its industrial ruins as heritage, Detroit would rather be rid of decrepit industrial structures and move on to a new prosperous era, presumably supported by a service /creative economy.

To support a healthier and more liberating relationship to time, Lynch proposed planning interventions, such as the construction of future prototypes, time enclaves, resource conservation and preservation (land, buildings, materials, cultural capital, memory). He discussed ways to manage the image of time and urban change that remain highly innovative today. I review these recommendations and propose others in light of postmodern changes.

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**CHANGING URBAN ENVIRONMENTS: CREATING AND MAINTAINING RESILIENT AND REGENERATIVE URBAN PLACES**
Abstract System ID#: 1366
Individual Paper

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Population growth is increasing rapidly, worldwide. The world is becoming more urban as well. Increased population growth in metropolitan areas has intensified burdens on landscapes to accommodate our daily needs for food, work, shelter, and recreation. Rapid urbanization influences ecological conditions by altering the physical mosaic of the landscape. One noticeable effect, landscape fragmentation (the division of large parcels of land into smaller lots), separates, degrades, and homogenizes habitats; in turn, affecting biogeochemical cycling and resulting in the erosion of biodiversity. Sprawl and climate change (severe and unpredictable weather events) exacerbates the negative ecological effects of urban development.

Despite an impressive array of urban spatial forms and structures, the complexity of these problems associated with rapid urbanization and climate change has made solutions increasingly difficult to attain. I offer a complementary spatial framework comprised of a set of principles to facilitate meaning dialogue in addressing these problems. At the core of these principles is the search for a pathway aimed at creating and maintaining adaptive and regenerative urban places. I explore supportive principles for creating such places. The principles include the design imperatives for change and uncertainty grounded on ecological science especially resiliency theory; conservation of ecosystem services; purposeful adaptation and mitigation of climate change impacts; adoption of regenerative practices, and commitment to place. I examine how the spatial framework compares with similar ones such as new urbanism, ecological urbanism, and landscape urbanism. I conclude by affirming that the effectiveness of these principles in managing growth in urban landscapes lies in their synergistic effects.

References


Abstract Index #: 902
	MAKING LIVABLE AND HEALTHY COMMUNITIES: PERSPECTIVES FROM ACADEMIA

Roundtable or Informal Discussion Session

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This roundtable will present perspectives from across the US on (approaches to or dimensions of) creating livable, healthy and sustainable communities. The development of such communities is becoming an important part of community development, urban design, policy planning, public health and urban affairs. With the desire by urban scholars throughout N. America and Europe to move from communities that are often described as sterile, unhealthy and boring places to live, it is important to understand the factors that make communities livable. This roundtable will discuss what has gone wrong in many majority and minority communities, and will offer suggestions and model programs for making them more healthy and livable.

References

- Comprehensive Planning for Public Health: Results of the Planning and Community Health Research Center Survey
SZIBBO, Nicola [University of California Berkeley] nszibbo@berkeley.edu

The question of how affordable housing is internally ‘mixed’ within a neighborhood, and its complexities associated with design-development and implementation has been well documented in the literature (Fraser et al 2013; Graves 2011; Roberts 2007; Schwartz & Tajbakhsh 1997). Lucy (1994) aptly notes that “issues in the virtues in the spatial mixing of differences, and in fostering similarities among people are continually in tension.”

The exact method and way in which mixing occurs (either at the scale of the building itself, the neighborhood scale or the scale of the region) varies widely depending on the particular context and type of affordable housing development scheme. However, little discussion has taken place regarding the design and spatiality of income mixing within a neighborhood.

Should residents of different income groups be mixed vertically in a building, or distributed horizontally in different buildings across a development? Should there be regulation or incentives to ensure that affordable housing is not only incorporated, but also well distributed in new sustainable neighborhoods, in order to ensure that social sustainability and social equity principles are being upheld? Given that affordable housing is optional in LEED-ND (Leadership in Energy and Environmental Design for Neighborhood Development), the possibility remains that affordable housing is either dismissed or treated in a segregated fashion. This paper will present survey and interview evidence from LEED-ND Accredited Professionals and policy analysis evidence from two LEED-ND platinum neighborhoods in Vancouver, British Columbia and Portland, Oregon to illustrate the various tensions that arise in the creation of mixed income neighborhoods. All of the case studies have incorporated income mixing schemes and have spatially mixed affordable housing in different ways. The paper will illuminate strategies for ‘what works’ and ‘what doesn’t’ with respect to affordable housing policy and design for planners, architects, consultants and developers in North America.

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