

JANUARY 2018



PINELLAS COUNTY

ECONOMIC DEVELOPMENT

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UNEMPLOYMENT ANALYSIS

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Executive Summary

Unemployment in Pinellas County has reach incredibly low levels thanks to solid economic growth. As of December 2017, the county's unemployment rate (3.2%) is 0.9 percentage points lower than the USA's and 0.5 percentage points lower than the state of Florida's. However there is a still a large population of unemployed persons in the county. Mostly this appears to exist because of frictional and seasonal reasons particularly caused by restaurants and temp agencies. Pinellas County also has a very large proportion of inexperienced and, potentially, under skilled unemployed persons in the community. Among large urban counties in Florida, Pinellas has by far the largest proportion of this category of unemployed workers. A potential area of concern regarding structural unemployment is that there may be too many unemployed managers in the county. Managerial professionals were the one occupational group with a larger number of unemployed persons than annual openings in the region.

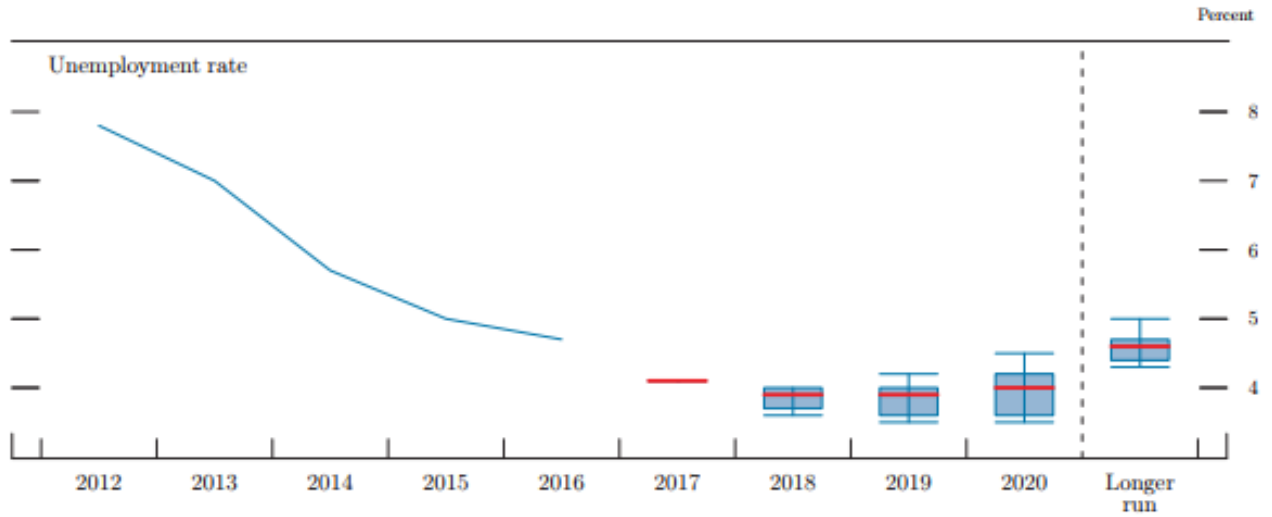
This analysis finds there is approximately a three to one ratio of annual job openings to each unemployed person in Pinellas. By comparison, this is a greater ratio than the surrounding MSA, Florida, and the US as a whole and suggests there is a very strong desire to hire in Pinellas County. Low paying and short tenured occupations have the largest ratio of annual openings to the number of unemployed people formerly in the occupation. Occupations found in targeted industries such as manufacturing and business and financial operation are generally in line with the three to one average. This suggests there are not enough unemployed workers in the county to fill available positions in high value jobs. As a result, competition for workers may increase and cause pay to rise, but firms may also have to look elsewhere in order to expand operations or invest in more capital equipment in order to expand sales.

Background

Pinellas County is fortunate to have an unemployment rate that is significantly below the average in Florida and the United States as a whole. The most recent estimates place Pinellas County as having an unemployment rate in December of 3.2% compared with Florida's unemployment rate of 3.7% and the national unemployment rate of 4.1%. Pinellas County's success comes with a favorable backdrop as the national economy is doing rather well with low unemployment and strong GDP growth. Job growth and falling unemployment are always positive signs, but do not tell the full economic story. Based on the most recent jobs report from the Department of Economic Opportunity, Pinellas County still has more than 15,000 persons who are unemployed. The central goal in this report is to analyze who these unemployed people are and understand related industry trends.

This past December, the [Federal Reserve](#) estimated the overall American economy should have a natural rate of unemployment between 4.3% and 5.0%. The natural rate of unemployment is a slightly confusing concept because many would assume that in a robust economy firing on all cylinder that the unemployment rate would be near 0%. The reality is that a modest amount of unemployment will almost always exist for various reasons. A student who recently graduated from college and is looking for a first job, a mall Santa in January, someone who quit a dead end job to find a career, and a mother reentering the workforce after taking time off for childcare are all examples of people who are temporarily unemployed. A capitalist economy is also ultimately Darwinian as new firms enter and exit the marketplace and new innovations cause changes in the economy's structure. The hip new experimental Scandinavian-Japanese fusion restaurant was maybe too hip and experimental, Pets.com was the Dot-Com Bubble's avatar incarnate, and the horse and buggy whip factory closed down thanks

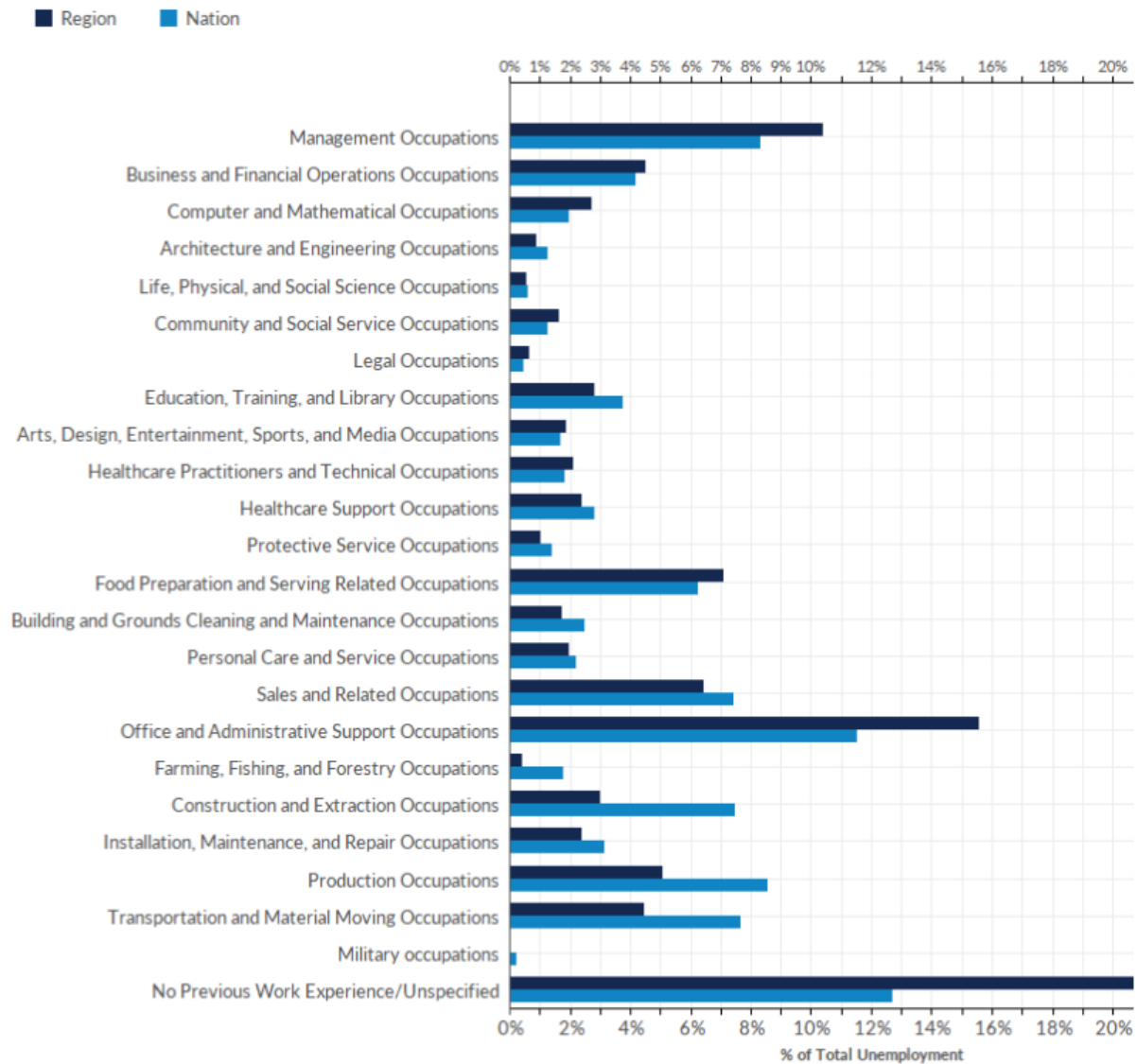
to Henry Ford. The above are all basic examples of firms leaving the marketplace and former employees being temporarily left without work until they can join new companies.



Federal Reserve FOMC December Unemployment Projections

The question raised is if Pinellas County has more horse and buggy whip craftsmen, recent college graduates, or Japano-Scandinavian chefs among the ranks of the unemployed. The following analysis looks at Emsi data to make better sense of unemployment in Pinellas County and how it stacks up nationally. Emsi’s data is slightly dated, coming from August of 2017, but their model tends to approximate reality well enough. As the statistical aphorism goes, “all models are wrong, but some are useful.”

The chart below is how Emsi categorizes the unemployed in Pinellas County based on their previous occupations. Occupations categorized using the Standard Occupational Classification System otherwise known as SOC. SOC codes range from 2 to 6 digits in length and attempt to categorize all occupations into families. For example, construction jobs start with the digits “47” while a carpenter’s SOC code is “47-2031”. The chart below is analysis for the broad two digit SOC families.



Unemployment by Occupation

The data point that most immediately jumps out from the chart is the number with no previous work experience or coming from an unspecified background who make up the local unemployed population. Pinellas County’s unemployed are over one and a half times more likely than the national average to fall into this category. Ultimately there are probably a few factors in play here. The first is that because the national average for unemployment is higher, there are likely at the national level more experienced workers who still are unemployed. Another possibility is that Pinellas County could be proving itself to be a popular location for younger persons to move after finishing their education. The region’s highly transient population and massive residential turnover hint at this possibility. A third possibility is that these could be the most difficult part of the workforce to accommodate and

consequently are part of the long term unemployed. Potentially this is a very unskilled part of the workforce who could use additional training or job placement counseling.

A quick analysis of the unemployment situation regionally and around the state reveals that Pinellas County appears to be in a unique situation along these lines.

Geography	% Unemployed “No Previous Work Experience/Unspecified”
Pinellas	21%
National	13%
Florida	8%
Tampa-St Petersburg-Clearwater MSA	13%
Hillsborough County	12%
Sarasota County	7%
Duval County	9%
Orange County	12%
Miami-Dade County	7%
Broward County	8%
Lee County	9%
Leon County	5%
Alachua County	7%

Admittedly, the above table raises more questions than it provides answers. Neighboring Hillsborough County comes the closest among other Florida counties in the percentage of unemployed people who have no previous work experience or come from an unspecified background, but Pinellas is driving the MSA’s trend. This could be an issue in Pinellas with employers having an extreme preference for experienced employees, but most likely there is a deeper issue at play because, when compared with other urban counties, Pinellas is an extreme outlier in the proportion of inexperienced unemployed persons.

Unemployment for other occupations generally seems to follow the pattern of higher location quotient occupations having greater than average unemployment rates. A location quotient is a basic measure of how prevalent an industry is in a community compared to a reference area. For example, if 10% of employees in a region work in manufacturing while 20% of employees in the reference area also work in manufacturing, then 10% divided by 20% yields a location quotient of 0.5. The data appendix in the back of the report shows the occupational location quotients for Pinellas compared with the United States as a whole. From an occupational standpoint, Pinellas County has a relatively high proportion of people working in fields such as a healthcare, legal services, business and financial operations, sales, restaurants, and office and administrative support.

Disproportionately, Pinellas County also has higher rates of unemployment for people working in the food service industry along with office and administrative support positions. This should not come as a surprise for two reasons. The first is that it should follow that when there is a higher rate of employment than the national average in a field, then there also is likely larger numbers of unemployed persons from that field because there is more employment churn. Second, both of these occupational categories tend to have short lasting employee tenure with higher turnover. Argument by definition comes into play here because the office and administrative support occupation category literally

contains temporary office workers as a large component. Unemployment in these fields almost certainly is a result of frictional unemployment as workers move in and out of the industry and often are searching for better and more permanent jobs. Restaurants are also notorious as one of the riskiest business models, so they open and close with much regularity. A comparison of annual openings shows that there are almost 8,000 annual job openings in the food service industry compared with approximately 1,300 unemployed restaurant workers. The office and administrative support occupational category similarly shows about 9,800 annual openings compared with 2,900 unemployed persons.

Management occupations however are a field with disproportionate representation among the unemployed that raises concern. Management is the only occupation field that has a lower number of annual openings than the number of unemployed persons in the county. This may point to a structural reason as to why there are so many unemployed managers in the area. One potential reason for a stubbornly high amount of managerial unemployment is that former managers may see themselves as being able to negotiate for higher wages and benefits compared to other occupations and are voluntarily staying unemployed in order to search for better opportunities. Another theory, and this exists solely as a hypothetical, is that unemployed managers could disproportionately be people who have hit the Peter principle's ("managers rise to their level of incompetence") level of incompetence and would be better suited returning to the non-managerial position they rose from.

The good news from this analysis of the unemployed is that the annual openings for most occupational categories largely outpaces the supply of workers. Overall there is almost a three to one ratio of open jobs to employees in Pinellas. Pinellas's ratio (2.96) is greater than the Tampa-St Petersburg-Clearwater MSA's (2.71), Florida's (2.69), and the USA's (2.74). The ratio of annual open jobs compared to the unemployed population illustrates how strong the local job market is and how much employers want to hire in Pinellas County. Predictably, the ratio of openings to the unemployed does concentrate in occupations that tend to be low wage and have a short tenure. Healthcare practitioner and support jobs however have almost five to one ratios of jobs to the unemployed. The flip side is that computer and mathematical occupations have slightly lower than a two to one ratio of the unemployed to annual openings. Computer and mathematical occupations also make up a relatively higher proportion of the local unemployed in Pinellas than the nation. This is a more concerning trend because it suggests a weakness in the tech industry.

Linking back occupations to the county's target industrial sectors (aviation/aerospace, medical/biotech manufacturing, business services, finance and insurance, defense/homeland security, and information technology), there is a slight concern that the job openings to unemployed people ratios are generally not as strong as low skill occupations, but they are not particularly weak either. The SOC category "production occupations," encompasses manufacturing jobs and has over a three to one ratio of openings to employees. This suggests that if a skilled manufacturing employees wants a job, then there should be very little preventing them getting one. The business and financial operations SOC family, that many business services and financial firms' employees fall into, is in a similar situation with a ratio that also is over three.

Conclusion

Pinellas County's unemployment situation is enviable for workers as much of the local unemployment is driven by frictional and seasonal reasons as opposed to structural causes or

macroeconomic trends. Small service firms, such as restaurants, opening and closing along with jobs on temporary contract are likely driving a large amount of employment churn in the county. The two largest concerns for the unemployed are the number of inexperienced unemployed workers and unemployed managers. Unemployed inexperienced workers are a category worth studying further as Pinellas appears to be leading the state in the proportion of the unemployed in this category. Workforce training, social services, and career counseling may be necessary as these are presumably some of the most difficult cases to employ. Unemployed managers are another conundrum that deserves further analysis to determine if this is caused by structural or merely frictional reasons.

The almost three to one ratio of job opening to the unemployed highlights that unemployed persons in Pinellas County, if motivated, should be able to find jobs without too much difficulty. This ratio also highlights how desirable Pinellas County is as a location for companies with its business friendly policies, low operating costs, and desirable climate. Competition for jobs appears to be fiercer in highly skilled fields, but jobs are abundantly available in lower skill occupations. Firms, particularly targeted industries, may have trouble locating and expanding in Pinellas County because unemployment, particularly for skilled workers, is so low.

The bottleneck limiting economic growth in Pinellas County, more than any issue, is workforce size. Employment statistics suggest that firms want to locate here and the county has a healthy economy with an abundance of jobs, but that the workforce size is not large enough to accommodate the demand. In the grand scheme of things this is a good problem to have, but still presents a challenge.

Data Appendix

Table 1: Unemployment by SOC Family

SOC	Occupation	Unemployed (8/2017)	% of Regional Unemployment	% of National Unemployment	Regional to National Ratio
11	Management Occupations	1,921	10%	8%	1.25
13	Business and Financial Operations Occupations	830	4%	4%	1
15	Computer and Mathematical Occupations	498	3%	2%	1.5
17	Architecture and Engineering Occupations	158	1%	1%	1
19	Life, Physical, and Social Science Occupations	93	1%	1%	1
21	Community and Social Service Occupations	294	2%	1%	2
23	Legal Occupations	111	1%	0%	n/a
25	Education, Training, and Library Occupations	512	3%	4%	0.75
27	Arts, Design, Entertainment, Sports, and Media Occupations	341	2%	2%	1
29	Healthcare Practitioners and Technical Occupations	385	2%	2%	1
31	Healthcare Support Occupations	436	2%	3%	0.67
33	Protective Service Occupations	185	1%	1%	1
35	Food Preparation and Serving Related Occupations	1,313	7%	6%	1.17
37	Building and Grounds Cleaning and Maintenance Occupations	316	2%	2%	1
39	Personal Care and Service Occupations	362	2%	2%	1
41	Sales and Related Occupations	1,189	6%	7%	0.86
43	Office and Administrative Support Occupations	2,882	16%	11%	1.45
45	Farming, Fishing, and Forestry Occupations	70	0%	2%	0
47	Construction and Extraction Occupations	548	3%	7%	0.43
49	Installation, Maintenance, and Repair Occupations	436	2%	3%	0.67
51	Production Occupations	934	5%	9%	0.56
53	Transportation and Material Moving Occupations	823	4%	8%	0.5
55	Military occupations	3	0%	0%	n/a
99	No Previous Work Experience/Unspecified	3,907	21%	13%	1.62

Table 2: Jobs, Annual Openings and Location Quotient by SOC Family

SOC	Description	2017 Jobs	Annual Openings	Opening to Jobs	Location Quotient
11	Management Occupations	18,413	1,600	0.09	0.74
13	Business and Financial Operations Occupations	27,378	2,688	0.10	1.18
15	Computer and Mathematical Occupations	12,986	977	0.08	1.01
17	Architecture and Engineering Occupations	5,815	475	0.08	0.77
19	Life, Physical, and Social Science Occupations	2,276	230	0.10	0.62
21	Community and Social Service Occupations	6,444	755	0.12	0.86
23	Legal Occupations	4,809	354	0.07	1.28
25	Education, Training, and Library Occupations	17,892	1,707	0.10	0.69
27	Arts, Design, Entertainment, Sports, and Media Occupations	7,988	894	0.11	0.96
29	Healthcare Practitioners and Technical Occupations	30,596	1,907	0.06	1.22
31	Healthcare Support Occupations	16,495	1,955	0.12	1.31
33	Protective Service Occupations	9,808	1,093	0.11	0.96
35	Food Preparation and Serving Related Occupations	46,446	7,887	0.17	1.21
37	Building and Grounds Cleaning and Maintenance Occupations	17,142	2,405	0.14	1
39	Personal Care and Service Occupations	16,213	2,609	0.16	0.86
41	Sales and Related Occupations	53,339	7,445	0.14	1.17
43	Office and Administrative Support Occupations	80,740	9,796	0.12	1.18
45	Farming, Fishing, and Forestry Occupations	501	79	0.16	0.15
47	Construction and Extraction Occupations	18,252	2,141	0.12	0.9
49	Installation, Maintenance, and Repair Occupations	18,409	1,965	0.11	1.06
51	Production Occupations	23,265	2,965	0.13	0.86
53	Transportation and Material Moving Occupations	18,990	2,606	0.14	0.63
55	Military occupations	2,853	342	0.12	0.5
99	Unclassified Occupation	0	0	NA	NA
	Total	457,050	54,875	0.12	

Table 3: Openings and Unemployment Comparison by SOC Family

	Unemployed	Annual Openings	More Openings than Unemployed	Openings to Unemployed Ratio
Management Occupations	1,921	1,600	FALSE	0.83
Business and Financial Operations Occupations	830	2,688	TRUE	3.24
Computer and Mathematical Occupations	498	977	TRUE	1.96
Architecture and Engineering Occupations	158	475	TRUE	3.01
Life, Physical, and Social Science Occupations	93	230	TRUE	2.47
Community and Social Service Occupations	294	755	TRUE	2.57
Legal Occupations	111	354	TRUE	3.19
Education, Training, and Library Occupations	512	1,707	TRUE	3.33
Arts, Design, Entertainment, Sports, and Media Occupations	341	894	TRUE	2.62
Healthcare Practitioners and Technical Occupations	385	1,907	TRUE	4.95
Healthcare Support Occupations	436	1,955	TRUE	4.48
Protective Service Occupations	185	1,093	TRUE	5.91
Food Preparation and Serving Related Occupations	1,313	7,887	TRUE	6.01
Building and Grounds Cleaning and Maintenance Occupations	316	2,405	TRUE	7.61
Personal Care and Service Occupations	362	2,609	TRUE	7.21
Sales and Related Occupations	1,189	7,445	TRUE	6.26
Office and Administrative Support Occupations	2,882	9,796	TRUE	3.40
Farming, Fishing, and Forestry Occupations	70	79	TRUE	1.13
Construction and Extraction Occupations	548	2,141	TRUE	3.91
Installation, Maintenance, and Repair Occupations	436	1,965	TRUE	4.51
Production Occupations	934	2,965	TRUE	3.17
Transportation and Material Moving Occupations	823	2,606	TRUE	3.17
Military occupations	3	342	TRUE	114.00
No Previous Work Experience/Unspecified	3,907	NA	NA	NA
Total	18,547	54,875	TRUE	2.96

Table 4: Annual Jobs and Unemployment Various Regions

Region	Unemployed Persons	Annual Available Jobs	Available Jobs to Unemployed Persons
Pinellas	18,547	54,875	2.96
Tampa-St Petersburg-Clearwater MSA	60,675	164,534	2.71
Florida	431,260	1,158,690	2.69
USA	7,287,117	19,951,462	2.74