



**National Institute of  
BUILDING SCIENCES**  
*An Authoritative Source of Innovative Solutions  
for the Built Environment*

GUIDELINES AND PROCEDURES  
for  
SUBMITTING COMMENTS  
to the  
REPRESENTATIVE HEARING ON  
PRODUCTIVITY AND THE WORKFORCE

**I. Introduction**

The U.S. building industry is under increasing pressure to deliver high-performance buildings to meet the needs of owners, occupants and government. Owners and contractors are looking for opportunities to improve certainty in schedule, performance and cost while managing risks. At the same time, there is an increasing concern from multiple segments of the industry on the availability of a skilled workforce, as well as the productivity of the buildings workforce today and into the future. Efforts are underway on a variety of fronts to address productivity challenges, including the expansion of off-site construction techniques; development of enhanced tools and processes such as building information modeling (BIM); enhancing mid- to long-term forecasts of workforce needs; and attracting new, technology-savvy entrants to the workforce through development of science, technology, engineering and mathematics (STEM) education programs.

In recognition of the impact the productivity and availability of a strong workforce has on all aspects of the building industry, the National Institute of Building Sciences (Institute) will conduct a representative hearing on productivity and the workforce on September 25, 2015. The hearing will provide an opportunity for representatives from the planning, design, construction, operations, ownership, finance, insurance, regulatory, manufacturing, academia and other segments of the U.S. building industry to speak about the challenges they face and offer potential solutions. The Institute is particularly interested in receiving testimony from organizations that have moved beyond traditional approaches to address needs related to advancements in productivity, safety and project certainty. Case studies, best practices and data on the benefits of such approaches are encouraged.

The hearing will be open to anyone interested in attending. Both written and oral testimony will be accepted from all interested parties.

The testimony will inform the development of a strategic vision to help the industry overcome the challenges posed by business as usual. The vision and accompanying principles and practices are intended to provide the industry as a whole, and individual participants, with a path forward to advance productivity and address workforce challenges. Results will inform activities within the Institute,

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including discussions during the Institute's Annual Conference, Building Innovation 2016; development of the 2015 Consultative Council's *Moving Forward* Report; and activities of the various Institute councils and committees.

The Institute strives to be a respected source of unbiased information for the building community. Given its Congressional mandate to serve as an authoritative national source to make findings and advise both the public and private sectors of the economy with respect to the use of building science and technology, the Institute is the ideal organization to lead a national conversation on these challenges before the building industry.

## **II. Representative Hearing Procedures**

The Institute has scheduled a representative hearing for September 25, 2015, beginning at 9:00 am EDT at its Headquarters, located at 1090 Vermont Ave., NW, Suite 700, Washington, DC 20005. Presiding over the hearing will be Charles L. Greco, President, Associated General Contractors of America and Chairman, Linbeck; Dorothy Robyn, Past Commissioner, Public Buildings Service, U.S. General Services Administration; and Institute President Henry L. Green, Hon. AIA. Sue Klawans, Past Institute Board Member and Director of Operational Excellence and Planning at Gilbane Building Company is serving as an Industry Advisor for development of the hearing. At the hearing, interested parties are invited to provide up to 10 minutes of testimony. While actual content of such testimony is up to the individual, each participant is encouraged to address the issues identified in section III. In addition to oral testimony, participants are encouraged to provide written testimony as identified in section IV(b).

Organizers will group participants into sessions based on the building community sectors they represent, and determine the actual times of sessions by the number of received requests to present. Initial sectors identified are listed below, but others may be added based on input received:

- Building Owners/Facility Managers/Commissioning
- Government (Policy/Regulatory/Voluntary)
- Architects/Engineers
- Contractors/Specifiers
- Insurance & Finance
- Codes & Standards/Rating Systems
- Software Vendors and Manufacturers
- Researchers, Academics
- Other

To provide oral testimony, interested parties should send a notice of intent to speak to Holly Velez via e-mail ([hvelez@nibs.org](mailto:hvelez@nibs.org)) by September 1, 2015 at 5:00 pm EDT. Such a notice shall include the following:

- Name of person testifying
- Contact information
- Organization representing (if applicable)
- Preferred building sector session

Once the deadline closes, requesters will be notified of the time for their particular session. The entire representative hearing will be open to interested parties.

### **III. Topics of Interest**

While the actual content of written and oral testimony is up to the participant, the Institute requests that participants focus on providing solutions-focused testimony that addresses the issues below. Participants are encouraged to provide case studies and best practices, along with supporting data on how they improved productivity, safety, project certainty, risk management or workforce participation.

- How do you/your organization currently collect and evaluate project data? Given your areas of interest and expertise, what project-related data is most critical?
- What challenges have you experienced related to benchmarking projects, either company- or industry-wide? How have you overcome such challenges? What additional efforts and data are required and how should such requirements be addressed? Are current metrics sufficient or are new productivity metrics required?
- What initiatives have your organization implemented to address current productivity or workforce challenges? How are they working (provide data if possible)?
- Provide recommendations on how the Institute and the building community should proceed in identifying, collecting, funding, compiling and disseminating information and data to advance productivity in the sector.
- What tools or techniques do you currently use to generate data-rich metrics? How can data-rich metrics be generated into the future and across the industry?
- How are tools, technologies, processes and practices, such as building information modeling (BIM), commissioning, off-site construction methods, integrated design processes, contracting models and performance-based contracting impacting productivity, safety, project certainty, schedule and project risk?

### **IV. Testimony Requirements**

In addition to giving oral testimony, speakers and others are encouraged to provide written comments to the Institute. While such comments are preferred to be received in advance of the hearing, the record will remain open for 15 days following the hearing. The record closes at 5:00 pm EDT on October 10, 2015. All testimony will be made public and, therefore, shall not contain information considered confidential. By providing testimony (either oral or written), the participant grants the Institute an unlimited, permanent, nonexclusive license, under which the Institute may film, record, transcribe or quote from the materials, create derivative works and publish in any format. The Institute will not be required to pay royalties or make any payment.

#### **a. Oral Testimony**

Participants testifying at the hearing will be allowed to utilize PowerPoint slides, which will then become part of the hearing record. (Presenters also are encouraged to provide written testimony to support any PowerPoint slides.) Such presentations shall be submitted to Holly Velez

([hvelez@nibs.org](mailto:hvelez@nibs.org)) by September 14 at 5:00 EDT. The presentation should be clearly labeled with the name of the presenter in the title. The hearing itself is subject to audio or video recording. No provisions will be available for offsite participation in the hearing.

**b. Written Testimony**

All interested parties are encouraged to provide written testimony to the Institute. While such testimony is preferred to be received in advance of the hearing, the record will remain open for 15 days following the hearing. The record closes at 5:00 pm EDT on October 10, 2015. All written testimony shall be submitted to Holly Velez ([hvelez@nibs.org](mailto:hvelez@nibs.org)) and include:

- Name of person providing testimony
- Complete contact information
- Organization representing (if applicable)
- Most appropriate building sector

**V. Presiding Representative Bios**

**Charles L. Greco** - Through his 36 years with Linbeck, Chuck has played many key roles from field engineer to Chairman. Today, as Chairman, Chuck applies lessons learned and best practices to priorities that include promoting the benefits of collaboration, preserving the company's innovative and creative culture, ensuring workplace safety, supporting industry education and generating corporate growth and opportunity. Chuck's personal passions are workplace safety and Lean Construction. Under his direction, Linbeck embraced an innovative and industry-leading Behavior Based Safety program that is held up as an industry model. Through this visionary program, Linbeck has attained one of the best workplace safety records in the building industry. Chuck is a past President of the Construction Industry Advisory Council for Texas A&M's Department of Construction Science. Chuck was recognized as a distinguished alumnus of the College of Architecture at A&M in 2005 and has served on the Dean's Advisory Council Executive Committee. Chuck serves on the Associated General Contractors of America board of directors as President. He also serves as an AGC Life Governor, past Chair of the AGC Building Division and past Chair of the Lean Construction Forum where he received Chair of the Year honors. Chuck serves on the Board of Directors of the AGC Houston Chapter and on the Board of Directors, AGC Texas Building Branch. He is also a past board member of the Lean Construction Institute and a past board member of the Construction Industry Round Table.

**Henry L. Green, Hon. AIA** - The National Institute of Building Sciences appointed Henry L. Green, Hon. AIA as President and CEO in August 2008. Prior to this appointment, Henry served as Executive Director of the Bureau of Construction Codes in the Michigan Department of Labor for more than 19 years. Henry was a founding member of the International Code Council Board of Directors, completing a term as President in 2006. He served as a member of the National Institute of Building Sciences Board of Directors for 8 years, completing a term as Chairman in 2003. Henry was a member of the Building Officials and Code Administrators International (BOCA) Board of Directors for 10 years, holding the position of President in 1997. Henry was named "1990 Man of the Year" by the Automatic Fire Alarm Association (AFFA), and received the "Distinguished Service to Government" Award from the Building Industry Association of Southeastern Michigan in 1998. He received the Walker S. Lee Award in

recognition of outstanding service to BOCA in 1999. In 2005, Henry was recognized by the United States House of Representatives for his work as "...a tireless advocate for building safety and enforcement of codes," and was named an Honorary Architect by the American Institute of Architects in 2008. In 2010, Henry was honored by the High-Performance Buildings Congressional Caucus Coalition with the Leadership Towards High-Performance Award in recognition of his personal and organizational leadership toward widespread realization of high-performance buildings. In 2013, Henry received the International Code Council's Bobby J. Fowler Award, which is presented to an individual whose contributions to the building safety industry advance the Code Council's goals to achieve a safer built environment.

**Dorothy Robyn** - Dorothy Robyn is a public policy expert who writes and consults on policy issues related to energy, infrastructure and telecommunications. She has 30 years of experience in government, academia and consulting. From 2012 to 2014, Dr. Robyn was the Commissioner of the Public Buildings Service (PBS) in the U.S. General Services Administration. From 2009 to 2012, she was the Deputy Under Secretary of Defense for Installations & Environment in the U.S. Department of Defense, where she provided Department-wide oversight of U.S. military bases around the world. From 1993 to 2001, she served as Special Assistant to the President for Economic Policy on the staff of the White House National Economic Council. Dr. Robyn previously was an assistant professor at Harvard's Kennedy School of Government, and a Principal with The Brattle Group, an economic consultancy. She is a member of the National Academy of Sciences Board on Energy and Environmental Systems and an advisory board to the Association of Defense Communities, and was recently named to a Task Force on Federal Energy Management established by Secretary of Energy Ernest Moniz. Dr. Robyn has an MPP and a Ph.D. in public policy from the University of California, Berkeley.

## **VI. About Hearing Sponsors**

**National Institute of Building Sciences** (Convener): The National Institute of Building Sciences was authorized by the U.S. Congress in the Housing and Community Development Act of 1974, Public Law 93-383. In establishing the Institute, Congress recognized the need for an organization that could serve as an interface between government and the private sector. The Institute's public interest mission is to serve the Nation by supporting advances in building science and technology to improve the built environment.

Through the Institute, Congress established a public/private partnership to enable findings on technical, building-related matters to be used effectively to improve government, commerce and industry.

The Institute is a non-profit, non-governmental organization bringing together representatives of government, the professions, industry, labor and consumer interests to focus on the identification and resolution of problems and potential problems that hamper the construction of safe, affordable structures for housing, commerce and industry throughout the United States. The Institute provides an authoritative source of advice for both the private and public sector of the economy with respect to the use of building science and technology. Congress recognized that the lack of such an authoritative voice was a burden on all those who plan, design, procure, construct, use, operate, maintain and retire physical facilities, and that this burden frequently resulted from failure to take full advantage of new useful technology that could improve our living environment. See [www.nibs.org](http://www.nibs.org).

**Autodesk** (Sponsor): Autodesk, Inc., is a leader in 3D design, engineering and entertainment software. Customers across the manufacturing, architecture, building, construction, and media and entertainment industries use Autodesk software to design, visualize, and simulate their ideas before they're ever built or created.

Low productivity has been a constant drumbeat in the construction industry, raising costs and adding risk and waste across project lifecycles. Today's successful construction firms are adopting new practices that help them improve all areas of their business and create a competitive advantage. These new ways of working are aided by great advancements in technology that positively impact how a project is completed from the planning phase to handover, and help firms increase their overall productivity. Since its introduction of AutoCAD software in 1982, Autodesk continues to develop the broadest portfolio of construction software available to help customers experience their ideas digitally before they are built. The Autodesk BIM Solutions for Construction help improve constructability, planning and logistics, team coordination and collaboration, and more. See [www.autodesk.com](http://www.autodesk.com).

**International Code Council** (Supporter): The International Code Council is a member-focused association dedicated to developing model codes and standards used in the design, build and compliance process to construct safe, sustainable, affordable and resilient structures. Most U.S. communities and many global markets choose the International Codes<sup>®</sup> (I-Codes<sup>®</sup>). The I-Codes<sup>®</sup> provide minimum safeguards for people at home, at school and in the workplace. They are a complete set of comprehensive, coordinated building safety and fire prevention codes that benefit public safety and support the industry's need for one set of codes without regional limitations.

To mentor future generations of code administrators and promote and support highly skilled building trades people, ICC created the High School Technical Training Program, a flexible educational program divided into four parts: building, plumbing, HVAC (mechanical) and electrical. This four-part structure enables a Technical School to integrate one or more parts of the program into its current construction trade curricula, providing students with a comprehensive knowledge of construction trades. Students completing all elements of a part, including a final exam, will receive a nationally-recognized Certificate of Achievement (COA). The program includes the necessary course materials, exams and certificates to ensure easy implementation. See [www.iccsafe.org](http://www.iccsafe.org).

## **VII. Contacts**

For information on the data collection initiative and the representative hearing, contact Ryan M. Colker, Director, Consultative Council/Presidential Advisor, National Institute of Building Sciences, 1090 Vermont Ave., NW, Suite 700, Washington, DC 20005, 202-289-7800x133, [rcolker@nibs.org](mailto:rcolker@nibs.org).