



Homebuilding Oversight and Inspection

In the winter issue of Granite State Builder, I wrote about the impacts of updating the New Hampshire Residential Energy Code. As the 2015 energy codes are being considered, a very important discussion is brewing – the ability of the authority having jurisdiction (AHJ) to apply and enforce this energy code.

New Hampshire is blessed to have professional, competent, and knowledgeable building code officials. They are supported by a strong organization, the New Hampshire Building Officials Association (NHBOA). NHBOA provides an opportunity for continuing education geared to the latest code updates and building technologies. New Hampshire code officials are burdened with needing to know and enforce two model building codes: the ICC I-Codes and the NFPA Life Safety Codes. Life safety is their number one concern as they review plans, inspect job sites, and help builders attain a certificate of occupancy.

For all of their concern, code officials are being assigned broader responsibilities as they must spend more time on each project to deal with matters relating to the energy code. Consider the fact that most of the building officials are career professionals who are finding that their communities need more of their time while town budgets reduce their resources. And then note that the vast institutional knowledge of these folks is sure to decline in the next several years as these dedicated professionals retire.

The above touches on the issues that have been identified by the National Institute of Building Sciences (NIBS) report completed for the International Codes Council (ICC). The complete report is available for download at <http://cymcdn.com/sites/www.nibs.org/resource/resmgr/ncgbcs/future-of-code-officials.pdf>.

This was highlighted at the recent DOE National Energy Codes Conference 2015, held in Nashville in March. Ryan Colker, NIBS Director, Consultative Council/Presidential Advisor presented the report findings. Mr. Colker discussed the evolution of energy codes, developing policies and technologies, a move toward life-cycle performance, and collaborative approaches for better project delivery.

Figure 1: Age of Respondents

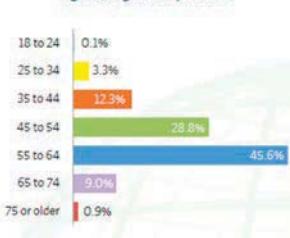


Figure 2: Plans to Leave the Building Regulatory Profession



The figures in this article are taken from the NIBS Report: Future of Code Officials.

With all of this progress toward the 2030 Energy Initiative, Colker acknowledged some disturbing details. The homebuilding industry is trying to rebuild as the economy recovers, but they are facing increased hard costs and a looming worker shortage. Trained workers who lost

their jobs during the Great Recession were forced to find other employment or take early retirement. Now that homebuilding jobs are back on the rise, the majority of those trained workers are not likely to return to their old jobs – a problem compounded with a lack of youth in the industry.

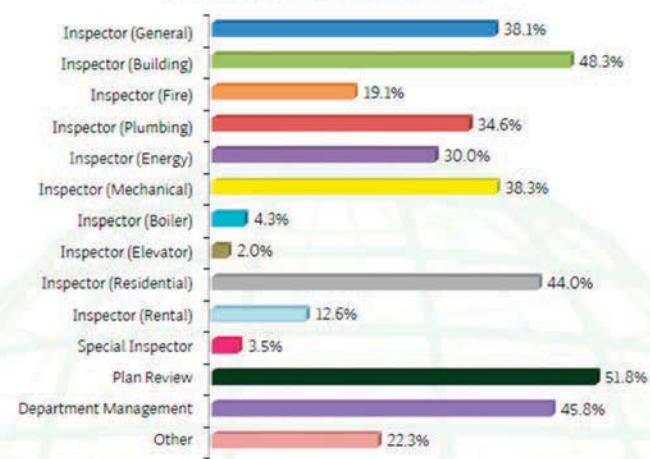
The story is very similar for New Hampshire building officials. As permits fell off, so did budgets. As budgets tightened, resources were strained. Today, NIBS survey results indicate that 55 percent of the code professionals across the U.S. are 55 years of age and older and another nearly 30 percent are 45-55 years old. About 30 percent of surveyed code professionals expect to retire within the next five years while only 20 percent are looking at continuing their career for 15 years or more. These statistics are important as communities look to recruit young talent capable of gaining the knowledge that was lost as veteran code officials retire.

Ryan Borkowski, building official for Hanover, New Hampshire and inspector for more than 20 years, agreed.

"It's a constant challenge," Borkowski said. "For one, the codes are always changing. Hopefully for creating better, safer and more efficient buildings. But that means you have to keep becoming educated over and over on not only the codes themselves but also ever advancing technologies, new products on the market, and advanced methods of construction. Builders expect the inspectors to know."

He raises an interesting point. Recent discussions at all levels have criticized the concept of the three year code update cycle. The inability to stay current has been a major symptom. However, code developers explain that there is a real need for that cycle. It is not about making money from publishing, but the need for the codes to stay current with new methods and materials of construction. Sometimes, the first edition of a new section has flaws that are repaired in the next. It is an evolutionary process. A case in point: It is my opinion that the 2015 energy code is an improvement over the 2012 version.

Roles in Building Regulation



"It's not just the inspectors that are aging," Borkowski said. "The same issue has hit many of the skilled trades. Experienced career electricians, plumbers and carpenters that I have known and worked with for many years often tell me that they see fewer and fewer younger people choosing to seek out a career in the building trades. There is a big concern that we are potentially losing an important asset made up of experience and knowledge that comes from spending years in learning and practicing one's chosen trade."

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The roles of builder and code official are clear, and sometimes those roles are not in harmony. But it is clear that both roles have suffered from the recession and need an influx of new, young participants. In its report, "Raising the Profile, Filling the Gaps," ICC recommends that code departments and supporting organizations take on greater exposure in their communities. "This includes participating at community-wide events, programs in the classroom, internship and mentoring programs, and engaging with other government officials." At the DOE National Energy Codes Workshop, many voices called for recognition of building officials as valuable members of the community on par with firefighting professionals. Indeed, the actions of building officials insure our collective safety.

One of the better results of the NIBS/ICC project is an opportunity to transfer or delegate the energy code elements of the code official's responsibilities to an independent third party. The following is taken from the March 17, 2015 e-newsletter of the Residential Energy Services Network (**RESNET**, www.resnet.us):

"An opportunity identified by the ICC is the outsourcing of energy code inspections to certified RESNET HERS Raters. This trend provides some exciting opportunities:

- Code jurisdictions can have confidence in certified HERS Raters undertaking energy code inspections with RESNET training, testing and quality assurance oversight procedures.
- Builders will have reduced costs in that they can have their HERS Rating and energy code inspection conducted by the same professional at the same visit to the home.
- A relief valve is provided to overburdened and increasingly understaffed code jurisdictions.
- The energy performance of homes will increase as code compliance is tied to the market force of the RESNET HERS Index.

In the 2015 International Energy Conservation Code (IECC), a new section (R406) provides a new compliance method called an Energy Rating Index (ERI). This is similar to the rating method used for Energy Star certifications. While section 406 does not require an above code rating as Energy Star does (by law, Energy Star must achieve savings 15 percent greater than the current IECC), the process is the same. With

New Hampshire utilities acting as Energy Star providers, builders can receive incentives for certification.

While the incentives aren't as clear cut for the National Green Building Program (http://www.homeinnovation.com/services/certification/green_homes), the program requires similar rough and final inspections as Energy Star. These inspections help the builder provide oversight in terms of the quality of installation while the code official gains the benefit of energy code compliance without investing a lot of time on plan review and inspection.

Borkowski added: "We all want the same thing in the end: A well-built product. The inspector-builder relationship shouldn't be adversarial. Really, we should be working together for the same result: To help build the best end product. One that meets minimum codes, will add value to the community, be energy efficient, safe. The more we can we can continue to improve the inspection process and make it more efficient for all parties, everyone wins."

It only makes sense. Help your community's code officials while insuring delivery of a quality product to your customer. Sign up for Energy Star and/or National Green Building Program certifications on your projects. ■



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