

Pennsylvania's Building Code Problem: A Primer

August 2016

The way that building codes are adopted and enforced is a complex and specialized issue, which is why it can be hard for municipal leaders, consumer advocates, and green building supporters to follow. But it's crucially important that these voices are part of the conversation around building codes, which impact every Pennsylvanian.

Here's our attempt at demystifying the current challenge to updating our state's building code.

What are Building Codes?

Building codes are the standards that apply to new construction and significant renovations, in order to ensure buildings are built with the most up-to-date practices to protect the health and welfare of building occupants. In Pennsylvania, building codes are primarily enforced by local municipalities, through the issuance of building permits and post-construction inspections.

History of Pennsylvania's Uniform Construction Code

In an effort to streamline and remove red tape, Pennsylvania adopted Act 45 of 1999 to create a Uniform Construction Code (UCC). The intent of this act, as stated in the legislation, was to:

- Provide standards for the protection of life, health, and property
- Encourage standardization and economy in construction
- Eliminate unnecessary duplication of effort and fees related to the review of construction plans and the inspection of construction projects
- Assure that officials charged with the administration and enforcement are adequately trained

The UCC is intended to reduce the burden on municipalities of creating their own code, and to provide consistency across the state to help reduce the burden on builders, plumbers, electricians, and others who work across multiple jurisdictions.

From the time this Act became effective in 2004 through 2011, the state's Review and Advisory Committee (RAC) reviewed and recommended the adoption of the International Construction Code (ICC)¹. Due to the fact that the ICC undergoes stringent review at the international level, the RAC did not review and vote on every single provision, but rather eliminated those deemed not appropriate for Pennsylvania.

In 2011, Act 1 amended the adoption process with unfortunate consequences. Because Act 1 required a 2/3s majority vote by the RAC to adopt each provision of the ICC, it effectively made it impossible to update the state's building code. Since the passage of this amendment, two ICC updates (2012 and 2015) have failed to be adopted in Pennsylvania, meaning our code is more than six years out of date, and that our residents are missing out on the latest health, safety, and efficiency standards.

¹ The ICC includes the International Building Code; International Energy Conservation Code; International Existing Building Code; International Fire Code; International Fuel Gas Code; International Mechanical Code; ICC Performance Code for Buildings and Facilities; International Plumbing Code; International Residential Code for One- and Two-Family Dwellings; and International Wildland-Urban Interface Code.

Negative Impacts of an Out-of-Date Code

Household Energy Costs

Building codes set a minimum standard for energy efficiency, reducing energy bills for the life of the structure. Utility costs for the average American household generally exceed real estate taxes or homeowners insurance, yet often are not given much consideration. The significance of utility costs is likely even greater in parts of Pennsylvania, due to older building stock and very cold winters.

While there is an additional cost to many energy efficiency improvements, a Pennsylvania-specific study by the Building Codes Assistance Project estimated this cost to average between \$1,403 and \$3,375 per home to meet the energy provisions in the 2012 ICC. The resulting energy savings for these improvements range from \$7,623-\$19,191 over the life of their 30-year mortgage, more than paying back the initial investment.

A matter of equity

We all use buildings, but most people don't know much about building science or construction. That's why Pennsylvania needs building codes in order to put minimum standards in place for efficiency, safety, and health protections.

Most home buyers and homeowners do not have the knowledge to know what to look for with respect to building performance, and wrongly assume that if a home is "built to code" it has the most up-to-date safety and efficiency provisions. In Pennsylvania, that unfortunately is not always the case.

Energy efficiency standards are particularly important to low-income households, who spend more of their income on energy utilities than the average population. In a recent American Council for an Energy Efficient Economy (ACEEE) study¹, Pennsylvania was the only state with two cities — Philadelphia and Pittsburgh — in the top ten list of greatest energy burden on lower-income populations. The problem can be even worse for tenants in rental units who have no control over how efficient their home is, even though they are the one stuck paying the bill.

Our building codes should be up-to-date, and help ensure that all Pennsylvanians benefit from efficiency standards, not just those with the education or the financial resources to hire an expert.

Insurance Costs

Building codes also influence homeowner insurance rates. ISO, an organization that provides research and data to the insurance industry, grades municipalities on hazard prevention. Pennsylvania's lack of up-to-date fire protection standards lowers this rating for all Pennsylvania communities, potentially leading to higher insurance rates. While the impact on insurance rates is likely small today, some experts suggest it will become more pronounced as more and more weather-related provisions are included in the code to account for increased storms, flooding, and sea level rise, all of which impact Pennsylvania communities.

Burden on Municipalities

Building code officials are required to update their training annually. However, these trainings are only offered on the current ICC. Because Pennsylvania is two code revisions behind, its building code inspectors are attending trainings on a code that isn't the same as the one they enforce. This also makes it difficult to hire new inspectors, as trainings and materials are no longer offered on the version of the code Pennsylvania uses. Municipalities have resorted to handing down and Xeroxing old training manuals from six or more years ago.

To get around this, larger cities like Philadelphia and Pittsburgh have started exploring options for updating their code separately from the state. Clearly this is not the ideal scenario, as it will result in a patchwork of building codes, undoing the efficiency improvements of Act 45. And yet, no one can blame an individual municipality for trying to update the codes that benefit its residents.

To update its code separately of the state, a municipality must petition the state Department of Labor and Industry. However, this option was intended to apply to individual code provisions, not entire code editions. Under the current law, in order to adopt the up-to-date code separately of the state, a municipality would have to justify, item by item, the thousands of provisions in the code. This is an unrealistic burden to put on municipalities, effectively trapping them in the state's outdated process.

Further, while a large city may be able to entertain options for updating its code separate of the state, we risk getting into a situation where smaller communities, especially those that have fewer resources, are left behind with outdated safety and energy codes.

Conclusion

Pennsylvania homeowners and businesses deserve a code review and adoption process that works, is uniform, and is up-to-date. Doing so promotes and protects the public interest.

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