

# The Value of Code Authorities: How UL Solutions Supports the Inspection Community



## Recent Federal Legislation Increases the Need for Code Authorities

Recent federal legislation, such as the Infrastructure Investment and Jobs Act, Inflation Reduction Act, and the CHIPS and Science Act, will provide extensive funding to modernize infrastructure and increase clean energy adoption to address climate challenges. These laws will continue to have a significant impact on the buildout of manufacturing supply chains in the U.S., due to an unprecedented number of large-scale infrastructure upgrades, investments in the electrical grid, numerous factory buildouts, and developing and maintaining a network of electrical vehicle charging stations.

It is important to get this right, and local government can play a key role by showing good stewardship, being proactive to make sure funding is spent judiciously and providing leadership to support investment in code authorities.

Qualified code authorities instill confidence and make local communities safer by reducing a variety of problems. The resources of model code enforcement need to increase to meet the demand. In short, we need more code authorities, not fewer.





## Code Authorities Are the Linchpin of the U.S. Safety System

The U.S. safety system is primarily a voluntary system made up of locally adopted model installation codes whose purpose is the practical safeguarding of persons and property. Model installation codes are essential. They require that products be certified to the appropriate safety standard, installed by trained, qualified installers and inspected and verified for code compliance by qualified, knowledgeable code authorities. Without these code authorities, the U.S. safety system would be at risk for widespread failure. Adopting model codes and requiring

that products are certified to a safety standard is arguably meaningless without qualified enforcement. Code authorities are the linchpin to keeping our communities' built environments safe.

Safety does not need to be sacrificed for the sake of productivity. In fact, safety is a key factor in increased productivity. Installing products in accordance with their certification and installation codes is not only the safest method, it's also the most efficient and cost-effective.



## Residential Aged Wiring Research Supports Increased Code Enforcement

The Fire Protection Research Foundation (FPRF) of the National Fire Protection Association (NFPA) issued a 2008 report on the Residential Electrical System Aging Research Project, indicating that aging residential electrical system components overall held up well. However, investigators uncovered many non-code-compliant installations that could result in a house fire or an electric shock to an unsuspecting future occupant.

Important messages from the report support the idea that the National Electrical Code® (NEC) be adopted as written. Code authorities play a particularly important role by enforcing the NEC and helping ensure compliance. Several factors contribute to non-code-compliant installations, including:

- lack of local laws requiring building permits and code inspection at time of the original construction or remodel.
- professional installers not understanding or complying with code requirements.
- unqualified homeowners performing their own electrical work.

Without proper building permits and code enforcement through qualified electrical inspections, these non-code-compliant installations can result in unsafe wiring practices. The potential hazards associated with a non-code-compliant installation may go undetected for many years, creating what some call “an accident waiting to happen” involving fire or an electric shock.

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## Code Enforcement Is Key to Safer Implementation of New Technology

Code authorities help protect the most valuable things in a community, like loved ones, our homes and our businesses. They help safeguard them from electrical, fire and structural hazards, as well as natural disasters, while increasing confidence and peace of mind for homeowners and business owners. As the development of renewable energy sources — such

as photovoltaic (PV) energy, battery energy storage, the electrification of automobiles and other vehicles as well as personal e-mobility devices — continues to increase, the ability to roll out these technologies safely is critical. The enforcement of model building, fire and electrical codes, as well as the use of appropriately certified batteries, battery charging systems, battery

energy storage systems and electrical systems, is imperative to the safer implementation of these technologies. Knowledgeable, experienced, qualified (certified or licensed where required) installers and code authorities are equally important to the success of these technologies.

# Effective Code Enforcement Can Lower Insurance Premiums for Property Owners

Municipalities owe it to their constituents to provide model code enforcement that provides safer installations and offers the opportunity to reduce property insurance costs.

Effective code enforcement can lead to safer buildings, less damage from catastrophes, and lower insurance premiums for properties in those communities. The Insurance Services Office (ISO) grades municipal building departments based on the Building Code Effectiveness Grading Schedule (BCEGS). The ISO assesses the building codes in effect in individual communities and how those communities enforce their building codes.

The program evaluates a community's building code enforcement in three areas:

1. Code administration
2. Plan review
3. Field inspection

The concept is simple: Municipalities with well-enforced, up-to-date codes should experience fewer losses, and insurance rates can reflect that. The prospect of lessening catastrophe-related damage and ultimately lowering insurance costs provides an incentive for communities to enforce their building codes rigorously. Insurers may use the assigned grading to determine property insurance values or grant premium credits for buildings constructed under strictly enforced codes.<sup>1</sup>



# The UL Enterprise Values and Supports Code Authorities as our Partners to Keep Communities Safer

The UL enterprise partners with code authorities by engaging their expertise in the development of UL certification requirements and in the activities of the UL Solutions Electrical Council and Fire Council. UL Solutions Brand Protection works with U.S. Customs to identify products bearing unauthorized UL Marks at the border to keep them out of the commerce stream and with law enforcement to prosecute those involved with misusing

the UL Mark. When appropriate, we make the public aware of products bearing unauthorized UL Marks by issuing public notices which can be viewed on [UL.com/news/public-notices](https://www.ul.com/news/public-notices). In addition, the UL Solutions Codes and Regulatory Services Department is dedicated to supporting the roles that code authorities and code enforcement have in keeping our communities safer. The UL enterprise views code authorities as essential partners in safety.



1. <https://www.isomitigation.com/bcegs/what-why-when-and-what-do-i-do/>  
<https://www.isomitigation.com/bcegs/>



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