



BUILDING INNOVATION
Conference

The Future of Codes and Standards: AI, Copyrights, and Implementation

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Copyrights 101: What is Copyright?



- A legal right that protects original works of authorship
- Includes books, music, art, software, films, etc.
- Gives the creator exclusive rights to use and distribute their work

What Can Be Copyrighted?



- Literary works (e.g., novels, poems)
- Musical works and recordings
- Dramatic and choreographic works
- Visual art and graphics
- Movies and audiovisual works
- Software and websites
- Standards!

What Cannot Be Copyrighted?



- Ideas, procedures, or methods
- Common knowledge or facts
- Titles, names, slogans
- Works not fixed in a tangible form

Use of AI in Copyrights (including Standards):

Legal Landscape

Legal Status: Evolving.

- Copyright protection requires human authorship. AI is not human.
- Works created entirely by AI are not copyrightable, but it can be used to assist in creation. But where is the line?
 - Use of AI as an assistive tool v. stand-in for human creativity
- See January 2025 [US Copyright Office Report](#).

Fair Use & Infringement



What is fair use?

That brief excerpts of copyright material may be quoted verbatim for purposes such as criticism, news reporting, teaching, and research, without the need for permission from or payment to the copyright holder.

Examples:

Commentary, criticism, news reporting, teaching

Infringement Examples:

Using copyrighted music in a video without permission

Copying large sections of a book or article without citation

The Pro Codes Act

“Incorporation by Reference”

Purpose:

Clarifies that privately developed technical standards retain copyright protection even when incorporated into law, provided they are made freely accessible online.

Key Provisions:

- Standards Development Organizations (SDOs) maintain copyright on standards incorporated by reference into laws or regulations.
- To retain copyright, SDOs must offer free online access to these standards.
- Burden of proof lies with challengers to demonstrate non-compliance with access requirements.

Pros (and Cons) of the Pro Codes Act



Supporters' Viewpoint:

- Ensures continued development of high-quality safety standards.
- Provides public access without taxpayer expense.
- Maintains the public-private partnership in standards development.

Critics' Concerns:

- May limit the public's ability to freely use and share laws that govern them.
- Potentially conflicts with the principle that laws should be freely accessible to all.
- Could hinder transparency and public participation in the legal process.

Legislative History of the Pro Codes Act



- Bipartisan and Bicameral in the 118th Congress
- Narrowly missed passing House on suspension – 2 votes short
- SDO's working on potential fixes to attract additional support
- Not currently introduced in 119th Congress; introduction pending following resolution of potential fixes
- Supported by a coalition of leading SDO's



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**Joan O'Neil, Chief Knowledge Officer & EVP
Content and Services
International Code Council**

ICC Introduction



ICC INNOVATION

Digital Solutions to Empower
Growth & Efficiency



Providing robust and reliable digital codification tools to ensure safety, compliance, and efficiency.



Create a digital work environment. Conduct government business from anywhere.



We offer a range of training and certification opportunities to earn CEUs, LUs, or PDHs for Code Council certification renewal and career advancement.





Automation, AI and Data Analytics

- **AI Functions as a revolutionary upgrade to search, helping users find information.**
- **We launched an ICC AI Navigator tool from concept to production in 5 months.**
- **Usage was immediate and growing we have exceeded 50K questions answered.**
- **We are refining the data sets that our AI is trained on to improve the quality.**
- **We are working to develop a highly accurate conversational version of AI.**

Learning from Industries that have Mastered Digital Experiences

- **Superior user experience must be prioritized and factored into the design.**
- **A robust user feedback program is essential to power product features and flow development.**
- **We use quantitative and qualitative feedback analysis to ensure best practices are used.**
- **Digital users go beyond reading - they click. Each screen needs a clear action using prominent buttons or links.**
- **Good support sites and in-application tools are part of making a good product experience.**

How Professionals Today Manage Knowledge



- **For International Code Council, our users need to access information from multiple devices as they are mobile and in the field.**
- **We respect users with multi-format needs and are investing in a “Content Hub” publishing model and backend infrastructure that allows offline and online content to be stored once and utilized many times.**
- **ICC has many formats available in digital and print and we are using QR codes for print to link to our digital platform to experience changes in the code content that help transition our users from print to digital.**

Breakthroughs in Usability, Accessibility, and Intelligence-Driven Insights can Inform the Next Evolution of Digital Ecosystems



- **We recently completed a full digital accessibility audit – this work generally makes the experience better for everyone.**
- **Since the online world allows consumers of content to provide immediate feedback, it is important to “always be listening” both algorithmically and with product support teams.**
- **Automated features such as user tagging or “most popular” lists help users “talk to themselves” by making content interactive.**
- **AI will power even better interactive features, and common themes will emerge.**

The Future-Ready Digital Workspace



- **A vibrant space where professionals can create or use content with powerful, interactive tools.**
- **Workflows that allow authors, editors, and production to collaborate on content offerings – that's the future-state workflow we envision.**
- **This future-state workflow includes a role for efficient user feedback in real-time for corrections or content enhancements.**



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Sandy Hess
Sales Manager
Community Development Solutions
International Code Council

Code Content embedded within Building Software



State and Local Codes are embedded within Permitting Software for ease of citing & referencing



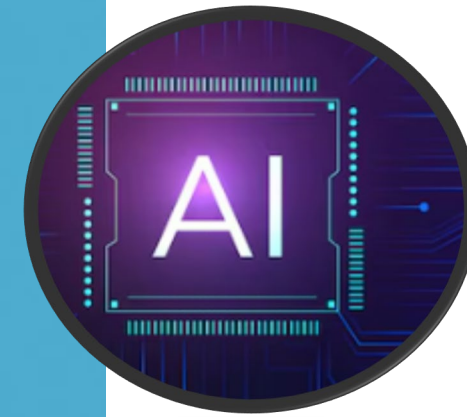
State and Local Codes are embedded within Plan Review Software for ease of citing & referencing



AI is now taking it a step further with automated checks for code compliance

AI and Machine Learning

Emerging technologies are using AI to detect code violations in submitted plans and to prioritize inspections based on risk assessments



Mobile Inspection Tools

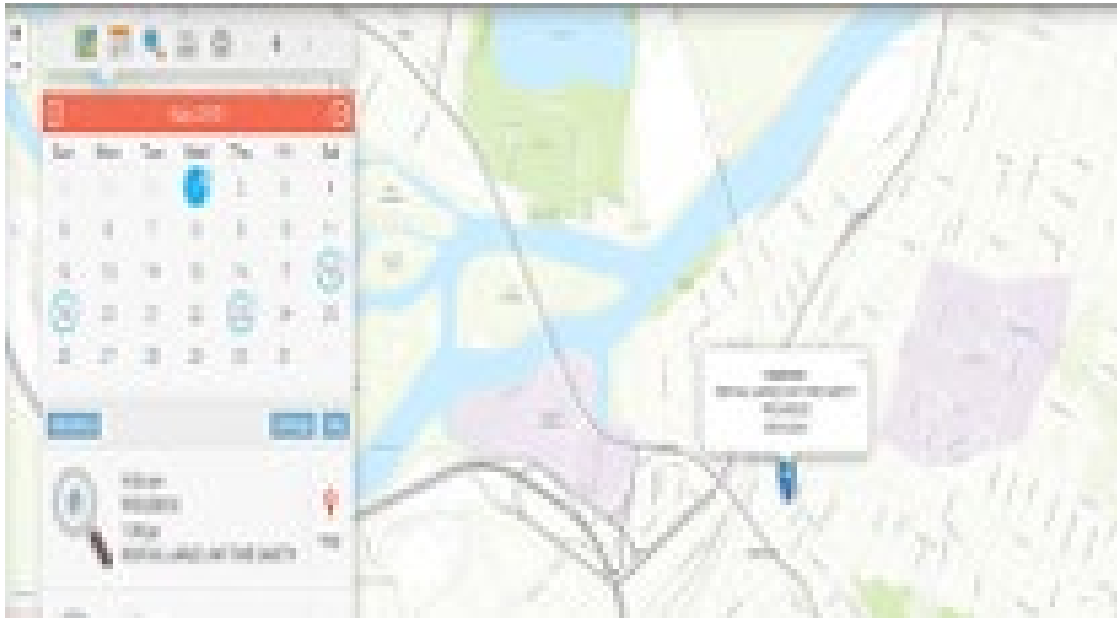


Remote Virtual Inspection (RVI) aids in quicker, safer inspections

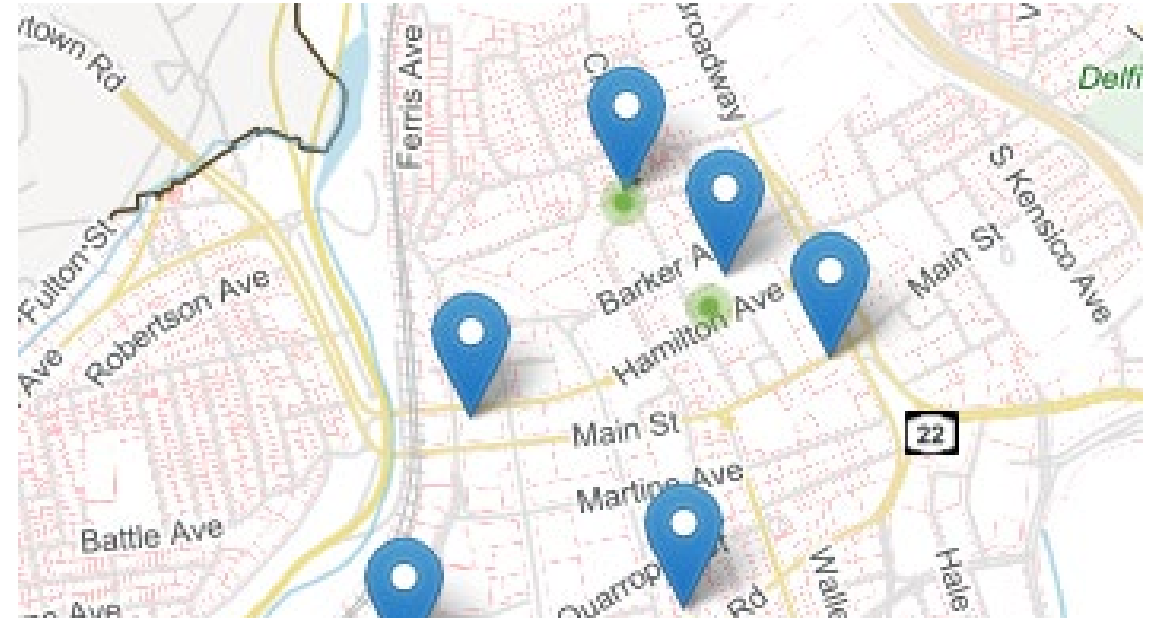


Mobile inspection tools using tablets/phones help streamline and validate inspections

Use of Geographic Information Systems (GIS)

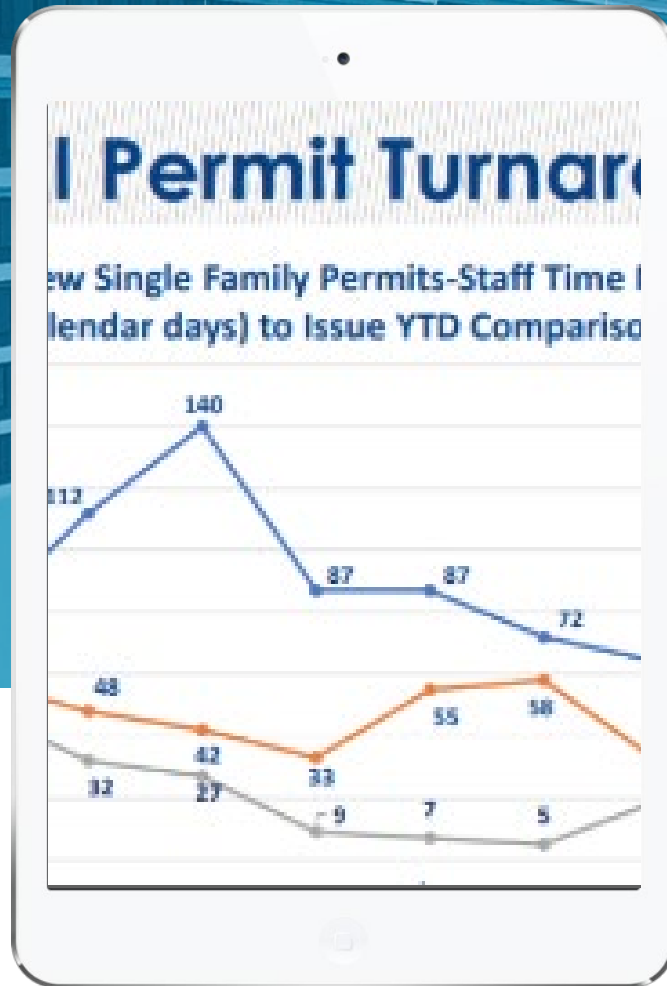


GIS Tools help building officials visualize zoning, land use and infrastructure data.



This integration allows for better decision making by showing how a building project fits within a broader urban or environmental context

Data Analytics and Dashboards



Some jurisdictions are using analytics to monitor permit trends and inspection results. Permit application turnaround Year over Year, for example, help display how the jurisdiction is servicing their constituents

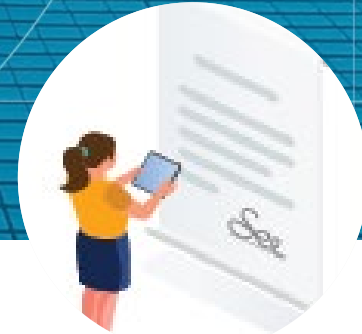
Recent Trends in the Local Government Building Department Technology



A City recently submitted an RFP for a single platform that collects public and private energy building data with an AI supported Helpdesk to aid in compliance



Another City is looking for a Helpdesk/Resource Center to assist Commercial Building owners to comply with the City's Building Benchmarking standards



AI Building Permit assistant to assist applicants in real-time to submit a permit application, validating addresses, etc



Thank You