

# Executive Summary

## ICC Code Comparison and future adoption of an updated code year

The ICC Codes are nationally recognized model codes that establish minimum standards for building safety, structural integrity, fire protection, energy efficiency, and overall community resilience. Adoption of updated codes helps ensure the City remains aligned with current industry standards, technological advancements, and evolving development trends.

The ICC code cycles have evolved substantially over the last decade, with each edition building upon previous improvements to address changing construction practices, emerging technologies, and increased resiliency needs. The progression from the 2015 codes through the 2024 codes reflects a clear movement toward modernization, sustainability, and enhanced public safety.

## Comparison of Code Cycles

### 2015 to 2018 ICC Codes

The 2018 ICC Codes primarily focused on incremental improvements in safety, enforcement clarity, and efficiency standards. Significant updates included:

- Improved wind design methodologies and structural provisions.
- More detailed requirements for rooftop structures and mechanical equipment.
- Enhanced fire-resistance continuity and egress calculations.
- Recognition of newer occupancy types and mixed-use developments.
- Improved building envelope standards and reduced air leakage requirements for better energy efficiency.

These changes provided communities with better enforcement tools, improved public safety standards, and more future-ready infrastructure requirements while maintaining familiarity with earlier code cycles.

### 2015 to 2021 ICC Codes

The 2021 ICC Codes represented a major modernization effort and introduced more transformative changes to construction and development standards, including:

- Introduction of mass timber construction allowances for buildings up to 18 stories.
- Formal regulation of emerging uses such as escape rooms and specialized occupancies.
- Additional sprinkler and fire-resistance requirements.
- Significant improvements to energy efficiency standards, including stricter insulation, air sealing, and HVAC performance requirements.
- Better flexibility for mixed-use developments and dense urban projects.
- Improved pathways for adaptive reuse and renovation of existing buildings.

The 2021 code cycle helped communities adapt to evolving construction technologies while continuing to improve life safety, sustainability, and redevelopment opportunities.

## **2015 to 2024 ICC Codes**

The 2024 ICC Codes continue the modernization efforts of prior cycles while placing additional emphasis on resiliency, renewable energy integration, and emerging technologies. Significant updates include:

- Improved coordination and consistency across all code sections.
- Enhanced egress systems and fire separation strategies for complex buildings.
- Adequately address electric vehicle charging stations and battery storage in a meaningful way uniformly across Code Sections.
- Further tightening of building envelope and energy performance standards.
- Continued flexibility for adaptive reuse, redevelopment, and renovation projects.

These updates are intended to address current and future development trends while improving resiliency and long-term community sustainability.

## **Benefits to the City**

Adoption of the 2024 ICC Codes would provide several important benefits to the City, including:

- Improved public safety through updated fire protection, structural design, and emergency egress requirements.
- Enhanced resiliency standards related to severe weather, wind loads, and disaster preparedness.
- Better regulation of modern development trends, including electric vehicle charging stations, battery storage systems, and renewable energy systems.
- Increased clarity and consistency in code enforcement, reducing interpretation conflicts for staff, contractors, and developers.
- Improved energy efficiency standards that may reduce long-term operating costs for residents and businesses.
- Greater flexibility for redevelopment, adaptive reuse projects, and modernization of existing structures.
- Alignment with current industry standards utilized throughout Texas and across the nation.

## **Recommendation**

Staff recommends that the City Council consider adoption of the 2024 ICC Codes through the ordinance adoption process, including the required public hearing procedures. Adoption of the updated codes will help ensure the City remains proactive in protecting public health, safety, and welfare while positioning the community for responsible growth, long-term resiliency, and future development opportunities.