City Council

Date: December 1, 2025

To: City Council

Through: Marc Heirshberg, Assistant City Manager
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From: Nana Appiah, Development Services Director
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Subject: Adoption of the 2024 International Building and Fire Codes and Local Amendments - Title 4 Building Regulations and Title 7 Fire Regulations (Citywide)

Purpose and Recommendation

The Development Services Department (DSD) and Mesa Fire and Medical Department (MFMD) request City Council approval to adopt the 2024 editions of the International Code Council (ICC) building and fire codes, along with local amendments (collectively referred to as the "2024 Codes"). Mesa has been using the 2018 editions since February 2019. Updating to the 2024 Codes will enhance life safety and fire operations, align Mesa's codes with regional jurisdictions, provide the development community with more building design options, benefit small businesses, and improve the City's Insurance Services Office (ISO) score.

Background

International building and fire codes are developed through a rigorous, consensus-based process by the International Code Council (ICC), involving fire safety professionals, industry experts, and public safety officials from across the globe. A new edition of the codes are published every three years and incorporates the latest advancements in fire science, building technology, and emergency response practices, addressing emerging hazards and lessons learned from real-world incidents. These ICC codes regulate the minimum fire and life safety requirements for all buildings, structures, and developments. The complete "family" of ICC Codes includes:

- International Building Code
- International Existing Building Code
- International Residential Code
- International Energy Conservation Code
- International Fire Code
- International Fuel Gas Code

- International Mechanical Code
- International Plumbing Code
- International Swimming Pool and Spa Code
- National Electrical Code*

* National Electric Code is published by the National Fire Protection Association, not the ICC.

These ICC codes have been adopted in most cities throughout the U.S. and all cities in the Phoenix-metro area. The following local municipalities have adopted the 2024 edition or are in the process:

- Apache Junction
- Avondale
- Buckeye
- Chandler
- Flagstaff
- Maricopa City
- Phoenix
- Surprise
- Tucson

Adoption of the 2024 Codes would ensure that Mesa continues to promote safety, innovation, and efficiency in building and fire protection practices. Amendments to the 2024 Codes to address local needs and fire department operations have been developed by City staff in collaboration with the development community. The amendments are based on the following objectives:

- Provide consistency with other local cities
- Support sensible recommendations from the development community
- Benefit small businesses
- Accommodate Mesa's fire department operations
- Provide clarification

The primary benefits the amendments would provide are as follows:

Consistency and Uniformity: Adopting the 2024 Codes aligns our local regulations with nationally recognized best practices. This uniformity is crucial for developers, architects, and contractors who operate across multiple jurisdictions, streamlining the design and construction process. It reduces confusion, minimizes the potential for conflicting requirements, and fosters a more efficient and predictable regulatory environment. Furthermore, it ensures that our community benefits from the same high level of fire safety as other leading jurisdictions.

Enhanced Life Safety and Property Protection: The 2024 Codes introduce updated provisions that directly improve the safety of occupants in various structures and reduce the risk of property loss. This includes, but is not limited to, refined requirements for fire alarm and suppression systems, egress paths, and hazardous material storage. By integrating these updated standards, the City can significantly mitigate fire risks and improve the survivability rate in fire incidents.

Addresses Emerging Technologies and Hazards: The fire safety landscape is constantly evolving. The 2024 Codes address new technologies, construction methods, and potential hazards that may not have been adequately covered in previous editions. This includes provisions related to unique fire hazards such as battery energy storage systems (BESS), electric vehicle charging stations, mass timber construction, and other innovations. By adopting the latest code, the City can ensure that regulations for these new technologies remain current and capable of addressing modern challenges effectively.

Improved Emergency Responder Safety: The 2024 Codes are not solely focused on public safety but incorporate measures that enhance the safety of our fire and emergency service personnel. Clear guidelines for building access, fire department connections, and hazardous material management contribute to safer operations for firefighters responding to incidents, ultimately protecting those who protect us.

Small Business Benefits: The proposed local amendments reduce the requirements for small businesses to have separate male and female restrooms, drinking fountains, and service sinks. These reduced requirements lower the cost of construction, especially for businesses moving into existing buildings.

Water Conservation: The proposed local amendments that are specifically tailored to the City's needs reduce the water flowrate for faucets, showers, and toilets to levels less than those in the international codes. The proposed flowrates will decrease water usage and align with several other local cities. Faucets, showers, and toilets with these lower flowrates are already commonly used and do not increase the cost of the construction.

The detailed recommended local amendments for each of the 2024 Codes are attached in Exhibits 1-11 of the report.

Coordination and Outreach

Public outreach for input from stakeholders and the development community was accomplished through discussions at two Development Advisory Forums (DAF), emails to the DAF distribution list (approx. 300 email addresses), an open public meeting, online form for public comment and suggestions (posted for 6 months), and contact with the Chamber of Commerce and Building Board of Appeals.

Staff coordinated with the Home Builders Association of Central Arizona (HBACA), Salt River Project, Southwest Energy Efficiency Project (SWEEP), and other municipalities to develop consistent and practical local amendments.

Staff received written letters endorsing Mesa's adoption of the 2024 Codes and amendments from the HBACA, SRP, and SWEEP.

Recommendation/Implementation

Staff recommends the adoption of the 2014 Codes with amendments to become effective 30 days from the date of City Council approval (January 8, 2026).

Exhibits

Exhibit 1 - Amendments Title 4 Building Regulations Chapter 1 Mesa Administrative Code
Exhibit 2 - Amendments to the 2024 International Building Code
Exhibit 3 - Amendments to the 2024 International Residential Code
Exhibit 4 - Amendments to the 2023 National Electrical Code
Exhibit 5 - Amendments to the 2024 International Plumbing Code
Exhibit 6 - Amendments to the 2024 International Mechanical Code
Exhibit 7 - Amendments to the 2024 International Fuel Gas Code
Exhibit 8 - Amendments to the 2024 International Existing Building Code
Exhibit 9 - Amendments to the 2024 International Energy Conservation Code
Exhibit 10 - Amendments to the 2024 International Swimming Pool and Spa Code
Exhibit 11 - Amendments to the 2024 International Fire Code