City Council Report

Date: December 10, 2018

To: City Council

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From: Mary Cameli, Fire Chief
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Subject: Proposed Modification to City Code, Title 4, Chapter 1, Administrative Code, Chapters 2 through 9 Building Codes, and Title 7, Chapter 2, Fire Code (Citywide)

Purpose and Recommendation

The Development Services Department (DSD) and the Mesa Fire/Medical Department (MFMD) are requesting Council approval to adopt the 2018 edition of the International Code Council (ICC) family of building and fire codes, 2017 edition of the National Electrical Code, and local amendments to each code. These codes are collectively referred to as the "2018 Codes" in this report. Adoption of the 2018 Codes will improve life safety and fire operations, bring Mesa's building and fire codes in alignment with regional cities, provide the development community with more building design options, and maintain the City's Insurance Services Office (ISO) score.

Background

The International Code Council published the first edition of ICC Codes in 2000 as a response to technical disparities among the previous three sets of model codes used in the U.S. at the time. Since then, revised ICC codes have been published every 3-years with updates that address changes in modern building designs, recognize advancements in fire protection, and provide clarification for ease of use.

The City of Mesa has been using the 2006 edition of building codes since February 4, 2007, the 2006 edition of the fire code since February 4, 2008, and the 2009 International Energy Conservation Code since 2012. These codes regulate the minimum fire and life safety requirements for all buildings, structures, and developments in the City of Mesa.

The family of ICC Codes include:

- International Building Code (IBC)
- International Existing Building Code (IEBC)
- International Residential Code (IRC)
- International Energy Conservation Code (IECC)
- International Fire Code (IFC)
- International Fuel Gas Code (IFGC)
- International Mechanical Code (IMC)
- International Plumbing Code (IPC)
- International Swimming Pool and Spa Code* (ISPSC)
- National Electrical Code** (NEC)

* New to the 2018 ICC family of codes – pool provisions previously included in the IRC
** National Electric Code is published by the National Fire Protection Association (NFPA), not the ICC.

Amendments to the 2018 edition of the codes have been developed by City staff in collaboration with the development community to address local conditions, MFMD operations and equipment, proposals by the development community, provide consistency with previous amendments, and uniformity with regional cities. These codes have been reviewed with the development community and other interested stakeholders over the past year. When developing the amendments, the goals were to amend the ICC Codes as minimally as possible, keep existing (2006) amendments that have proven to be effective, be consistent with regional cities, and to consider cost and impact to the development community.

Amendments to the Mesa Administrative Code are only to update references from the 2006 to the 2018 codes, including the addition of the International Swimming Pool and Spa Code. All other sections of the Administrative code remain the same.

Discussion

Goals of DSD and MFMD include improving life safety and fire operations, aligning Mesa's building and fire codes with regional cities, and providing the development community with up-to-date design options.

Updated Codes

Mesa's 2006 Codes are outdated and no longer used in other regional cities. The 2006 Fire Code alone has been amended several times to remain current with technology, other Codes, and State Statutes. Developers and builders regularly reach out to Development Services and the Fire/Medical Department requesting to use the more recent Codes. Additionally, the City's ISO score is potentially negatively impacted when the adopted Codes are over ten years old. The ISO score impacts insurance rates. ISO requires a jurisdiction to enforce the most current edition of the building codes to receive the highest possible points in that element of its audit.

Local Amendments

When developing amendments to the 2018 Codes, the objectives were to amend the 2018 Codes as little as possible, retain 2006 amendments that have proven to be effective, be consistent with regional cities, and to consider cost and impact to the development community. Our effort to amend as little as possible resulted in 40%

fewer amendments than the 2006 Codes. Local amendments to the 2018 codes include provisions for fire department operations and equipment. For example, requirements to use the specific hose threads that match fire department hose connections. The amendments also include provisions that match with other city, county and state requirements, such as Mesa Zoning and Engineering Standards and Maricopa Flood Control. A summary list of amendments is included as Exhibit A.

Collaboration

Uniformity and consistency of construction regulations across the valley is a high priority concern of the development industry. Most of the Phoenix-metro area cities are already on the 2012 or 2015 Codes and are updating to the 2018 Codes. Adopting the 2018 Codes will make Mesa consistent with more than 10 regional cities. Public outreach for input from stakeholders and the development community was accomplished through discussions at four Development Advisory Forums (DAF), emails to the DAF distribution list, on-line form for public comment and suggestions (posted for 1-year), contact with the Chamber of Commerce and Building Board of Appeals. We have received proposed amendments from the Home Builders Association (HBA), Arizona Multi-housing Association, and others. The majority of proposals from these groups have been incorporated into the recommended amendments. We also met with valley building officials and fire marshals in our effort to have consistent amendments. As a result, many of the recommended amendments are the same as other local cities.

Options

Option 1: Accept Recommendation. Accepting the recommendation will allow the City to adopt the most current Codes, provide regional consistency, improve public health and safety.

Option 2: No action. Not adopting the recommended Codes will have the effect of continuing with outdated Codes, lack of regional consistency, and lack of options for the development community.

Fiscal Impact

DSD and MFMD staff believes that the overall fiscal impact for the development industry will be positive. The majority of changes by ICC were to clarify the codes, provide additional options and make the documents more efficient to use. According to the National Association of Home Builders, which produces in-depth economic analyses of the home building industry based on private and government data, there is an overall cost savings using the 2018 Codes vs. 2015 codes of $2,900 to $5,197 per home (studies for 2018 vs. 2006 do not exist).

Concurrence

The Development Services Department and Fire/Medical Department endorse the adoption of the 2018 Codes and amendments. Other City departments involved in the revised 2018 Codes include Environmental Management and Sustainability, Water Resources and Engineering. DSD and MFMD wish to acknowledge the participation and contribution of the development community in this process. Their comments and feedback are essential to the success of this code adoption process.