



22-1018

TITLE: Consider/Discuss/Act on an Ordinance to Amend Chapter 122 "Construction Regulations," Article II, "Building Codes," by Amending Sections 122-25 and 122-26 titled "*International Building Code* and *International Residential Code* Adopted" and "Amendments to Building and Residential Codes," respectively, by Amending Section 122-30 titled "*International Mechanical Code* Adopted; Amendments," by Amending Sections 122-31 and 122-32 titled "*International Plumbing Code* Adopted" and "Amendments to Plumbing Code," respectively, by Amending Section 122-34 titled "*International Fuel Gas Code* Adopted," by Amending Sections 122-35 and 122-36 titled "*International Energy Conservation Code* Adopted" and "Amendments to the Energy Conservation Code" respectively, by Amending Sections 122-38 and 122-39 titled "*International Property Maintenance Code* Adopted and "Amendments to Property Maintenance Code," respectively, by Amending Section 122-40 titled "*International Swimming Pool and Spa Code* Adopted," by Adding Sections 122-41, 122-42 and 122-43 titled "Amendments to the "*International Swimming Pool and Spa Code*," "*International Existing Building Code* Adopted" and "Amendments to *International Existing Building Code*," respectively; and through the Amendment of Chapter 126, "Housing," by Amending Article II, "Substandard Structures," by Amending Section 126-40 titled "*International Property Maintenance Code* Adopted," all of which Amendments and Additions are for the purpose of Adopting the 2021 Editions of such *International Codes* and by the Adoption of Local Amendments to such *International Codes* including certain Amendments recommended by the North Central Texas Council of Governments, and repealing all conflicting Ordinances

COUNCIL GOAL: Safe and Secure Community
(6D: Pursue and maintain the highest Insurance Services Office (ISO) fire and building protection classification)

MEETING DATE: November 1, 2022

DEPARTMENT: Development Services / Building Inspections

CONTACT: Suzanne Arnold, Chief Building Official

RECOMMENDED CITY COUNCIL ACTION:

- Staff recommends approval of the proposed ordinance.

ITEM SUMMARY:

- Every three years, the International Code Council (ICC) publishes new codes for the states and local municipalities to consider for adoption. Such codes must be adopted into ordinance to be effective.
- Enforcing the most current building codes is a requirement of maintaining the city's high ISO rating and IAS accreditation.
- The North Central Texas Council of Governments (NCTCOG) Regional Codes Coordinating Committee (RCCC) and its four Advisory Boards are comprised of local public and private code professionals (public building officials and inspectors, private architects and engineers, and construction and trades professionals) who review the latest editions of the model construction codes and recommend uniform amendments for the North Central Texas region. The City of McKinney has historically adopted NCTCOG's recommended amendments.
- Staff proposes to adopt the NCTCOG's recommended amendments to the 2021 International Codes and carry forward all existing local amendments.
- On October 10, 2022, the Building and Standards Commission (BSC) held a public hearing to consider the adoption of the 2021 model codes, and at that meeting voted unanimously to make a recommendation to City Council for the adoption of the proposed model codes and amendments.
- The 2021 Model Codes (I-Code family) under consideration for recommendation to the City Council, include the following: International Building Code (IBC), International Residential Code (IRC), International Plumbing Code (IPC), International Mechanical Code (IMC), International Fuel Gas Code (IFGC), International Energy Conservation Code (IECC), International Property Maintenance Code (IMC), International Swimming Pool Spa Code (ISPSC), and International Existing Building Code (IEBC).
- Staff proposes an effective date of January 1, 2023.

BACKGROUND INFORMATION:

- Currently, the City is utilizing the 2018 Editions of the IBC, IMC, IPC, IFGC, IECC, IRC, IPMC, and ISPSC, with local and NCTCOG amendments.
- Every three years, the ICC publishes a Significant Changes book for each of the above noted codes. The significant changes are classified in three types - clarification, modification and addition. Only a portion of the total number of code changes (approx. 1800 total changes) were identified as a significant relating to methods, materials or costs of construction or other change that impacts development.
- City staff used these publications and other references to produce reports of the significant changes in each code, which are publicized on the City's website. Staff delivered presentations summarizing the changes in two public meetings held in Council Chambers, as well as presenting them to the McKinney Development Committee (MDC) for discussion and feedback, followed by another public presentation before the Building and Standards Commission (BSC). A synopsis of the most significant changes in the model codes is below:
 - **BUILDING CODE** - For the purpose of calculating the occupant capacity of a required storm shelter, such as in a new school, a new NCTCOG amendment allows the Chief Building Official to accept a building occupant load below what is calculated by code if

valid reasons exist.

- BUILDING CODE - The code has expanded the applications of mass timber construction, creating three new construction types under Type IV and assigning comprehensive regulations to them.
 - BUILDING CODE/RESIDENTIAL CODE - Intermodal Shipping Containers are now addressed and regulated in the codes.
 - RESIDENTIAL CODE - A new NCTCOG amendment requires blocking in the walls adjacent to at least one ground-floor toilet in each house to secure the potential future installation of grab bars, a measure that helps facilitate aging in place.
 - RESIDENTIAL CODE - A new NCTCOG amendment requires that the distance of a swimming pool from a foundation or structural footing compared to the depth of the pool at that point must be at least a 1:1 ratio.
 - RESIDENTIAL CODE - The structural design criteria for decks has been rewritten.
 - PLUMBING CODE - The IPC contains new regulations pertaining to multi-user restrooms that serve all genders.
 - PLUMBING CODE - Push-fit joints are now allowed on plastic DWV piping.
 - PLUMBING CODE - New section addresses how to regulate new methods of relining drainpipes as a means of repair.
 - ENERGY CONSERVATION CODE - Large openings such as overhead doors to a patio that one might see on a restaurant or bar, must interlock with the HVAC system. The air conditioning temperature set point must adjust up to 90 degrees or the heating set point must adjust down to 55 degrees to avoid the system running excessively to compensate for the opening.
 - SWIMMING POOL & SPA CODE - A new section expands requirements for pool equipment rooms and chemical storage for commercial pools.
 - EXISTING BUILDING CODE - This is the first time that McKinney is adopting this code in its entirety, though we have utilized it through references in the IRC and IBC. This code aims to provide design flexibility for buildings constructed more than two code cycles back, where strict compliance with current codes may be technically infeasible, while still preserving the intent of life safety regulations.
- The Building and Standards Commission considered and accepted the summary of the Significant Changes on October 10, 2022.
 - The adoption of the proposed code ordinance will bring the City of McKinney to a Code update cycle of approximately three years respective of the recommendations by the International Code Council and in line with the Codes adopted by area municipalities.

FINANCIAL SUMMARY:

- N/A

BOARD OR COMMISSION RECOMMENDATION:

- On October 10, 2022, The Building and Standards Commission considered the 2021 Model Code adoption ordinance and amendments and voted unanimously to approve a recommendation for the City Council to adopt the presented changes, as written.

SUPPORTING MATERIALS:

[Ordinance](#)