

WORK SESSION AGENDA ITEM SUMMARY

City Council



STAFF

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SUBJECT FOR DISCUSSION

2024 Building Codes

EXECUTIVE SUMMARY

The purpose of this item is to update Council on the adoption of 2024 Building Codes, including Energy Code and Wildland Urban Interface Code (WUI). The 2024 International Codes (2024 I-Codes) represent the most up-to-date, comprehensive, and fully integrated body of codes regulating building construction and systems using prescriptive and performance-related provisions. The purpose of these codes is to establish the minimum construction requirements to safeguard the public health, safety, and general welfare by regulating structural strength and stability, sanitation, light and ventilation, energy conservation, and property protection from hazards attributed to the built environment within the City of Fort Collins.

GENERAL DIRECTION SOUGHT AND SPECIFIC QUESTIONS TO BE ANSWERED

1. What questions does council have related to the proposed package of building codes?
2. Does Council have feedback or suggestions ahead of building code adoption?

BACKGROUND / DISCUSSION

Since 1924, the City of Fort Collins has periodically reviewed, amended, and adopted the latest nationally recognized building standards available at the time. The City has updated the minimum construction standards 17 times since 1924. Building codes and standards are reviewed and voted on by code officials and construction industry professionals from across the country and published every three years under the oversight of the *International Code Council (ICC)*. These core 2024 I-Codes represent the latest construction publications from ICC.

The code updates include the following scope of work:

1. **2024 International Codes (Adopted April 2022):** This is a complete replacement of the 2021 editions of:

- International Building Code
- International Residential Code
- International Mechanical Code
- International Fuel Gas Code
- International Energy Conservation Code
- International Existing Building Code
- International Swimming Pool and Spa Code
- International Property Maintenance Code
- Colorado Plumbing Code

2. **State Bills/Laws:**

- Colorado Wildlife Resiliency Code
- HB25-1273 Residential building stair modernization

3. **Local Amendment highlights:**

- Remove redundancies with 2024 International Codes
- Increase Flexibility for EV Charging
- Simplify Accessory Dwelling Units (ADU) Requirements
- Update compliance path using Modeled Energy Code Targets
- Increase Accuracy of Water Demand Estimates
- Improve Visitability (Guest Accessibility)
- Codify Community-Based Shelters & Temporary Emergency Uses

REVIEW PROCESS

The implementation of new building standards can impact the construction industry and local economy. To better understand these impacts, a code review committee is convened to review the new codes and all local amendments. In addition to representation from several surrounding jurisdictions, the code review committee represents a wide spectrum of volunteers from across the local construction industry including private developers, residential and commercial builders, architects, engineers, representatives from the energy conservation sector, and Poudre Fire Authority.

Starting in March 2025, the code review committee began meeting to discuss new code, proposed amendments, and current amendments. This committee completed their review on July 30, 2025, with support to adopt the 2024 I-Codes and amendments. While this review process requires considerable time and resources, it produces enforceable and effective building codes and amendments that the community and construction industry create and support together while continuing to align with the City's goals and priorities.

Generally, the committee focused on the following themes when considering local amendments:

- Align our regulations with other jurisdictions for consistent quality/safety outcomes and customer experience
- Advance City goals from City Plan, Our Climate Future and other guiding documents with impact
- Improve customer experience through simplicity, consistency and optionality
- Consider short-term and long-term costs and savings implications
- Remove redundancies and overlap where international codes have caught up to local amendments

KEY UPDATES AND CHANGES

A handful of new amendments are being proposed, some of which support the City's sustainability and Our Climate Future goals. Part of the focus for this adoption is to simplify our local amendments and achieve greater alignment regionally. There are also several state bills and laws recently approved that have significant impact to building codes throughout the state.

Some current amendments are now represented in the new 2024 code as written (codes have caught up to us) and will be proposed to be deleted, while other amendments that did not have the intended outcomes, have proven to be ineffective or were cumbersome as written will also be proposed to be deleted or modified.

Mandated State Bills/Laws:

- HB25-1273: Residential building stair modernization. Signed by the Governor on 5/13/2025, this bill requires any jurisdiction with a population over 100,000 to adopt a building code to allow up to 5 stories of a multifamily residential building that satisfies certain life/safety requirements to be served by a single exit.
- SB23-166: The Colorado wildfire resiliency code bill. Signed into law in 2023, this bill established a Wildfire Resiliency Code Board that was tasked with defining the Wildland Urban Interface (WUI) and adopting rules for jurisdictions in an area within the WUI by July 1, 2025. These rules include a requirement that jurisdictions adopt a code, such as the International Wildland-Urban Interface Code by April 1, 2026.

The code adoption committee strongly recommended, although adopting the Colorado Wildfire Resiliency Code at the same time as the other building codes, to postpone the effective date to allow impacted community members additional time to familiarize themselves with the requirements. It will also give staff the ability to better coordinate and implement as this code impacts multiple departments and their processes.

Strategic Local Amendments:

- Increase Flexibility for EV Charging: After introducing EV charging requirements in the 2021 building code adoption, staff has received significant feedback regarding the implementation and impact of these requirements on new and existing developments and buildings. Proposed changes to the amendment will add some flexibility of choice and design in the application of the requirements while still maintaining strong alignment with city plans and Council priorities. This includes some trade-off options for builders and developers that want to install more EV chargers than the minimum required by code. Changes also include reworking language to better align with the recently adopted changes

to the Land Use Code. The Affordable Housing Electric Vehicle Infrastructure Offset Program is ongoing and has provided fee credits to a minimum of three developments to date.

- Simplify Accessory Dwelling Units (ADU) Requirements: Adoption of this appendix allows flexibility in adding an ADU to an existing dwelling. The provisions in the appendix provide tradeoffs that lessen the complexity, construction waste, and financial impacts of the project while maintaining life and safety considerations.
- Update Energy Code Compliance Targets: As part of the energy code process Fort Collins has developed targets for energy use (EUI) and carbon emissions (CO₂e) spanning code years 2024, 2027, and 2030. To reach this goal, Fort Collins plans to utilize existing performance modeling code paths that have been adapted to use these EUI and CO₂e targets for corresponding code years. The deliverable is an energy compliance report demonstrating code compliance for the current code year. Establishing targets out to year 2030 will enable the building community to plan years in advance. This continues to move new construction beyond the traditional prescriptive code approach in the International Energy Conservation Code.

The City's approach would encourage a shift to efficient electric space and water heating that results in improved comfort, health and safety, electric grid resiliency, reduced energy burden, and an intent to improve cost of construction. Once established, EUI and CO₂e targets for new construction will subsequently require higher performance each code cycle through a stepped approach to the 2030 code. Recognized as an innovative approach, the City was awarded a U.S. Department of Energy federal grant in July of 2023 through the Infrastructure Investment and Jobs Act. The grant supported the establishment of a community advisory group, who engaged and advised staff throughout the development and implementation of the modeled performance code path, which was an input into the broader code review committee. More information on this advisory group can be found as an attachment to the AIS.

The U.S. Department of Energy completed analysis of the economic impacts of updating the 2021 residential energy code to the 2024 code. This analysis indicates an annual energy cost savings of 5.5% and a small reduction in cost of construction, resulting in life cycle cost savings of \$2,496 for dwellings in our climate zone. Revised building energy code amendments, and the aforementioned modeled compliance path could result in increased costs to construction of approximately \$1,600-\$3,500 as builders choose to install high-efficiency electric heating equipment.

Increase Accuracy of Water Demand Estimates: The Water Demand Calculator (WDC) is a method used to right-size plumbing distribution system in residential buildings, by using a more accurate method to estimate peak flow rate. The proposed code requires the WDC be used for multi-unit residential and allows it as optional for single-unit residential. The current method outlined in the IPC has not been updated in decades to account for greater fixtures' efficiency levels installed in today's buildings. Actual peak flows are much lower today than the current method uses. Right sizing plumbing distribution systems inside a building can save on water development fees and costs before construction, material costs during construction, and energy and water use after occupancy.

- Improve Visitability (Guest Accessibility): A visitability amendment was added and adopted with the 2021 building codes. Visitability is a common term used in building and accessibility codes. However, the definition and requirements associated with visitability vary between those codes. For added clarity and ease of understanding, our local amendment will propose changing the nomenclature to "guest accessibility". Additionally, allowing the required main floor guest accessible bathroom to be accessed from a bedroom, in addition to the living, dining or kitchen, will add additional flexibility in design while still providing improved accessibility.
- Codify Community-Based Shelters & Temporary Emergency Uses: As a long-standing program, the permitting process and life/safety requirements associated with community based and seasonal

overflow shelters by way of an alternative means of compliance, will now be proposed to be codified. This allows facilities, after obtaining a building permit and meeting all life/safety requirements, to operate as a community-based shelter for no more than 180 days in a 12-month period and seasonal overflow shelters to operate from the beginning of November through the end of April.

This amended appendix to the International Existing Building Code also provides the ability to extend temporary uses to other existing structures in the case of an emergency event declared by local, state or federal entities.

NEXT STEPS

Through September and October, staff will present the proposed building codes and local amendments to numerous Boards and Commissions and external community groups, seeking additional feedback and participation prior to bringing them to Council for adoption by the end of the year. The target effective date of the updated codes is January 1, 2026 with the Colorado Wildfire Resiliency code effective as of April 1, 2026.

ATTACHMENTS

1. 2024 Building Code Adoption Committee summary
2. Community Advisory Group summary for the Zero Carbon Construction Energy Code
3. Presentation