9/9/2025

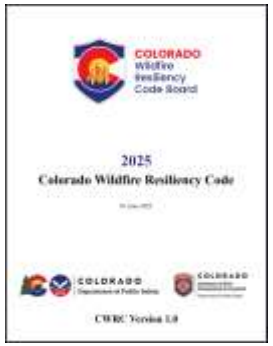
2024 Building Codes

Marcus Coldiron
Chief Building Official

Council Questions

- What questions does council have related to the proposed package of building codes?

- Does Council have feedback or suggestions ahead of building code adoption?



Background

- The International Code Council (ICC) generates new International Building Codes every three years through the ICC Code Development Process.

- The City has reviewed, amended and adopted the latest nationally recognized building standards available every three years, since 2006 and has adopted building codes since 1924.

- Typically, 9 codes + National Electric Code are adopted. Due to recent additions to state law and changing climatic concern in the region, the Colorado Wildfire Resiliency Code will be an addition for the 2024 cycle.

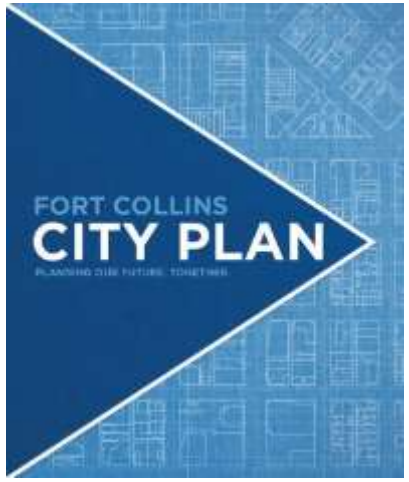
Timeline

Fort Collins steps to building code adoption (January 2025 – January 2026)

- ICC Code Release ✓
- Staff Review ✓
- Code Review Committee ✓
- Council work Session
- Boards and Commissions
- City Council Regular Session

Approach

- Building codes are a critical piece of accomplishing community goals and vison, closely aligning with many City plans.
- Collaboration and alignment regionally, where able to.
- Simplify and clarify existing local amendments.
- Consider the impact to housing affordability.
- Incremental change to support incremental impact and cost



Residential Building Stair Modernization (IBC)

- HB – 1273 requires any jurisdiction with a population over 100k to adopt a building code to allow up to a 5-story multifamily building to be served by a single exit
- Must meet specific life/safety requirements: fire suppression, fire rated stairwell, egress width etc.
- Increases design options and especially useful for infill projects
- Encourages higher density

Colorado Wildfire Resiliency Code

- HB23-166 established a Wildfire Resiliency Code Board tasked with defining the Wildland Urban Interface (WUI) and adopting rules for jurisdictions within the WUI

- Jurisdictions within the WUI must adopt a code by 4/1/2026

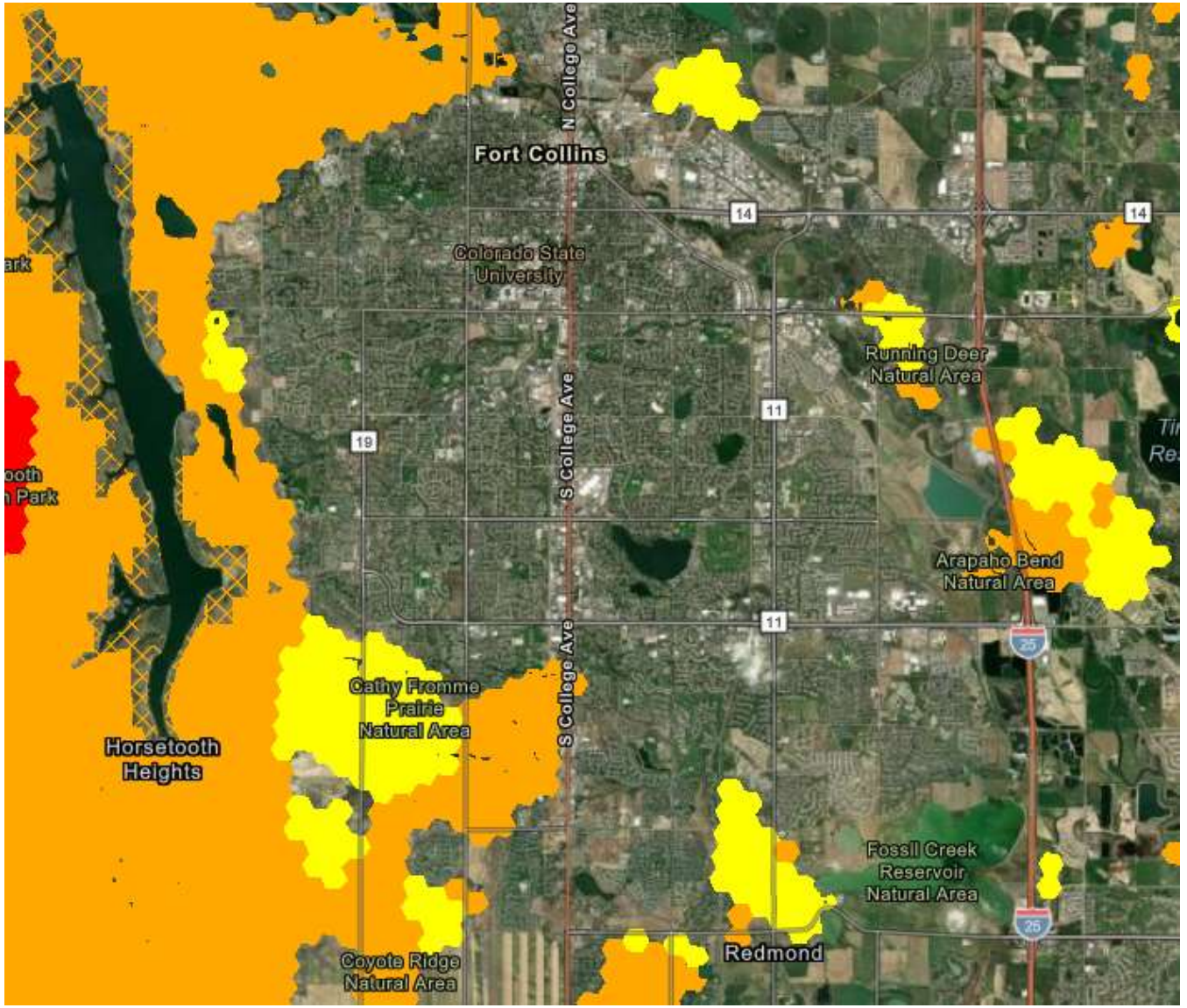
- Includes exterior hardening and material requirements, establishes a landscaping buffer area and provides ongoing maintenance requirements

- Proposed to adopt with the larger building code adoption but setting an effective date of **4/1/2026**

Colorado Wildfire Resiliency Code Map

- Most of Fort Collins does not fall within the WUI
- Largest impacts to NW and SW Fort Collins
- Some impact NE and SE Fort Collins

[2025 Colorado Wildfire Resiliency Code Map]



EV Charging (IBC)

- Revised language to align with newest Land Use Code
  - Provided parking spaces vs required parking spaces
- Separated new buildings and additions requirements for clarity.
  - Additions providing new parking must comply with the percentages required for new buildings
  - Additions not providing new parking must provide at least one EVSE installed space
- Design flexibility added
  - Trade offs provided for installing above minimum requirements
  - Encourages additional EV installed and EV Ready installations

EV Charging - Example

New residential project -100 parking spaces provided

	EVSE Installed	EV Ready (receptacle installed)	EV Capable (conduit only)
Standard compliance path	10	20	40
Alternative 1	15	20	10
Alternative 2	10	30	10

Accessory Dwelling Unit – Appendix (IRC)

- Provides additional flexibility when adding an ADU to an existing dwelling.
- Requires interconnected smoke and carbon monoxide alarms that alerts occupants in both dwellings simultaneously in lieu of a 1-hour fire rated assembly.
- Prioritizes early alert over fire resistance
- This lessens complexity, construction waste, financial impacts while maintaining life/safety considerations

Water Demand Calculator (IPC & IRC)

- Water Demand Calculator is a method used to right size plumbing distribution systems in buildings
- Required for multi-unit residential projects and an option for single unit residential projects
- Can result in savings on water development fees (ECLO and FCLWD) and material cost during construction
- This method requires designing to modern peak flows which can save energy, water use after occupancy and improve water quality

Temporary Emergency Uses – Appendix E (IEBC)

Codifies a long-standing program allowing facilities to act as Community-Based Shelters and Seasonal Overflow Shelters without the need to perform a change of occupancy.

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.

Community Based Shelters	Seasonal Overflow Shelters	Emergency Events
• Facilities must obtain a building permit and meet minimum life/safety requirements. • Limited to 180 days per 12-month period. • 15 occupants maximum	• Facilities must obtain a building permit and meet minimum life/safety requirements. • Allows operation from November-April • Occupants limited by floor area	• Facilities must obtain a building permit and meet minimum life/safety requirements. • Requires emergency event declaration • Code official authorized to increase number of occupants during an emergency

Energy Code: Enhanced compliance using Modeled Performance

- **Meeting Colorado's electric ready and solar ready code.**
- **Developed *"Path to Zero Carbon New Construction by 2030"***
  - Moves from traditional *"Prescriptive"* path to *"Performance"* modeling

Prescriptive Path

- Follow set rules and checklists
- Component-based (insulation, window, HVAC)
- More familiarity w/ smaller builders
- Limited flexibility

Modeled Performance Path

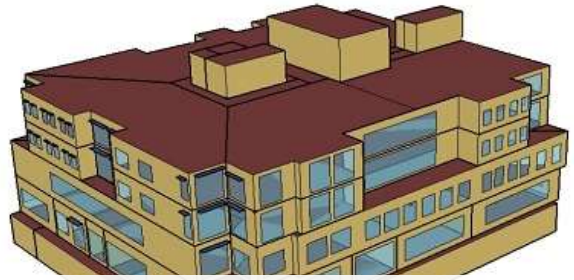
- Utilizes energy modeling / simulations
- Allow trade-offs (e.g. better windows vs less insulation)
- Energy and Carbon targets de-bias code from fossil fuel
- Emphasis on QA and verification

Benefits of Modeled Performance Path

- Flexibility for designers and builders
- Supports innovation & new technologies
- Optimized energy savings
- Better alignment with community goals

Energy Code – Setting a Trajectory to Zero Carbon

- **Spans three code cycles: 2024, 2027, and 2030**
  - Building community sees future energy targets years in advance



Building model developed from performance energy modeling

Commercial

Building Type	2024 code EUI target	2027 code EUI target[b]	2030 code EUI target[b]
Apartment	29	26	24
Medium Office (5k-50k ft2)	23	21	20
Strip Mall	35	30	25

Residential

Energy Rating Index (ERI) **not including renewable energy*			**CO_2e Index** **including adjusted OPP*		
Adopted IECC code year			**Adopted IECC code year**		
2024	**2027[b]**	**2030[b]**	**2024**	**2027[b]**	**2030[b]**
50	46	42	50	25	0

b. These are projected ERI and CO_2e targets for buildings constructed under the 2027 and 2030 code cycles. These are not required for the 2024 code cycle.

Cost Impact Analysis

- Staff is actively working on a comprehensive cost impact analysis.

- Cost impact analysis to date from:
  - U.S. Department of Energy through Pacific Northwest National Laboratories
  - National Association of Home Builders through Home Innovation Research Labs.

- Preliminary estimates appear to show that the adoption of the 2024 building codes and local amendments will increase the cost of construction less than 1% when compared to the 2021 building codes.

What questions does council have related to the proposed package of Building Codes?

Does Council have feedback or suggestions ahead of Building Code adoption?