10/15/2025

2024 Building Codes

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Chief Building Official

Staff Recommendation

Background

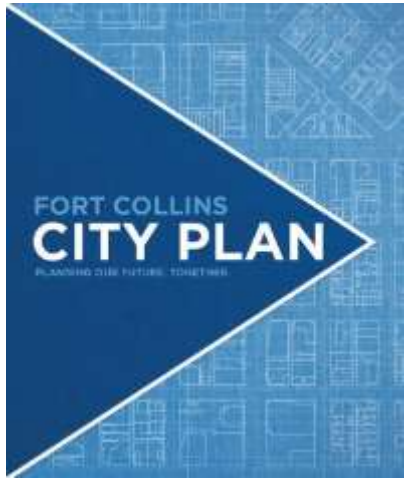
- The City has reviewed, amended and adopted the latest nationally recognized building standards available every three years, since 2006 and has adopted building codes since 1924.
- Code's Purpose: Safeguard public health, safety, and general welfare by regulating structural strength and stability, sanitation, light and ventilation, and energy conservation
- Local Amendments: Strategic alignment to Citywide plans and policies above and beyond requirements outlined in the I-Codes prescriptively.

Recommendation

- Staff recommends adoption of the Code package to update from the current 2021 codes to the 2024 I-Codes, including local amendments.

Approach

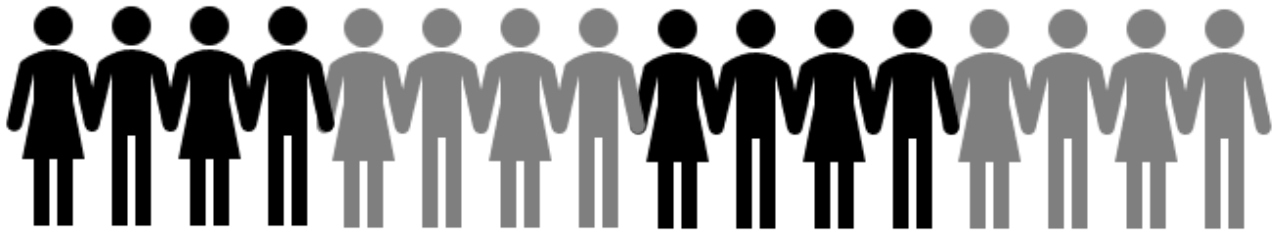
- Building codes are a critical piece of accomplishing community goals and vison, closely aligning with many City plans.
- Collaboration and alignment regionally, where able to.
- Simplify and clarify existing local amendments.
- Consider the impact to housing affordability.
- Incremental change to support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



Timeline

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

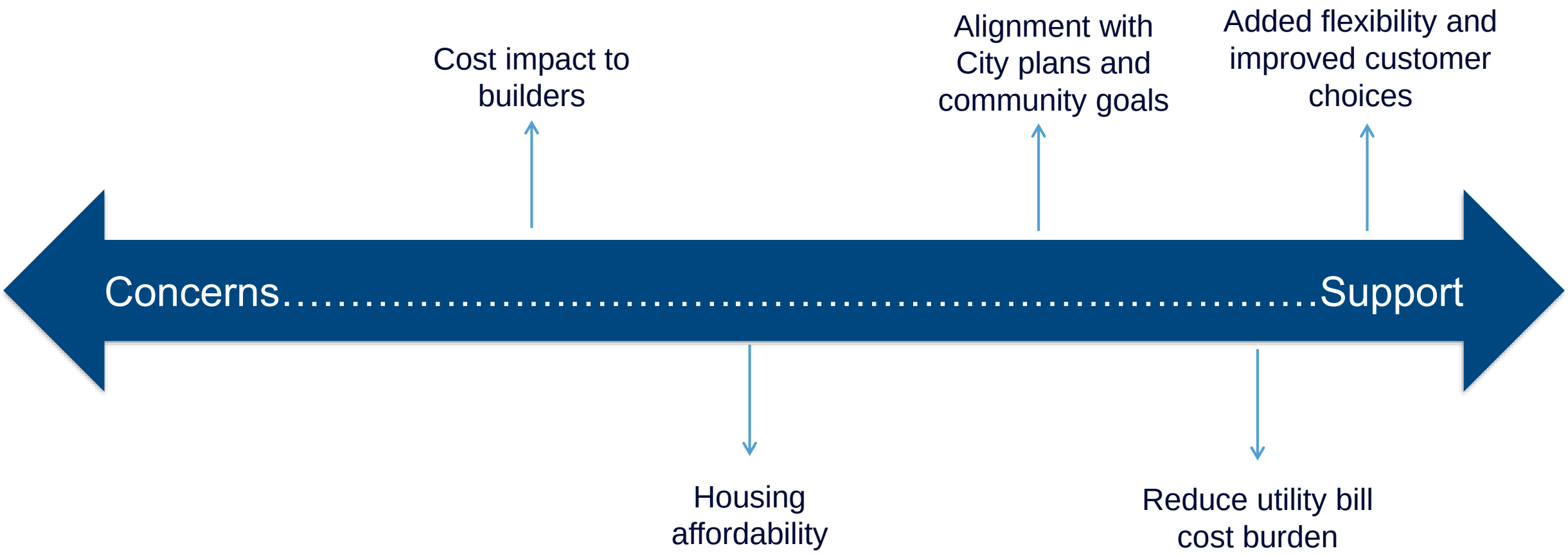
- ICC Code Release ✓
- Staff Review ✓
- Code Review Committee & Energy Code Advisory Board ✓
- Council work Session ✓
- Boards and Commissions ✓
- City Council Regular Session



Boards, Commissions and Public Engagement

City Boards and Commissions	
Energy Board (8/14)	PFA Fire Board (11/18)
Air Quality Advisory Board (8/25)	Planning & Zoning Commission (11/20)
Affordable Housing Board (10/2)	Water Commission (memo)
Natural Resource Advisory Board (10/15)	Disability Advisory Board (memo)
Building Review Commission (10/30)	
External Groups	
Northern CO Home Builders Association (10/2)	Fort Collins Board of Realtors (11/13)
Fort Collins Chamber of Commerce (LLAC) (10/10)	

Community Feedback



Key Changes

State Requirements

- Residential Building Stair Modernization – Multifamily up to 5 stories served by 1 exit
- Colorado Wildfire Resiliency Code

Key Local Amendments

- EV charging requirements update
- ADU appendix
- Water Demand Calculator
- Emergency Use appendix – Community Based Shelters, Seasonal Overflow Shelter and Emergency Events
- Energy code updates – Prescriptive to Modeled Performance Path

Gender Neutral Signage – Existing Buildings

Staff Recommendation:

Require gender-neutral signage for an existing single user restroom in an existing building for any alteration to that restroom that requires a permit.

Other options:

1. Require gender-neutral signage in an existing building possessing a single user restroom, for any alteration that requires a permit.

2. Require gender-neutral signage for all existing single user restrooms.

State vs Local code comparison

Colorado Wildfire Resiliency Code

No significant differences. Split between LUC and Building Code. Small changes adding flexibility in protecting identified historic resources and to align with other local codes.

Residential Building Stair Modernization

No changes between local code and state requirements

State vs Local Energy code comparison

State of Colorado Model Electric Ready and Solar Ready Code

- This code ensures that new homes and buildings are equipped with infrastructure and design features to accommodate solar PV, electric vehicles and future switching to electric equipment and appliances. Fort Collins meets this code.

State of Colorado Model Low Energy and Carbon Code

- This code encourages reduced carbon emissions for new and renovated homes and buildings. Cities and counties adopting building code(s) after July 1, 2026 are required to adopt this code, or a code that stretches beyond. Fort Collins aims to meet or exceed this code.

Fort Collins Path to Zero Carbon New Construction by 2030

- The proposed code supports Big Move 6 of Our Climate Future and establishes energy use and carbon emissions targets for new construction spanning three code cycles, 2024, 2027 and 2030. Each cycle establishes a new milestone of energy and carbon emissions reduction ultimately reaching zero by the 2030 code.

Cost Impact analysis

Analysis of the International Codes for residential single family and multifamily new construction started with two established cost analysis reports, one from the Department of Energy and the other from the National Association of Home Builders. Both reported a reduction in the cost of construction from the 2021 to the 2024 codes. Staff then expanded the analysis to include Fort Collins specific amendments changing from the 2021 to the 2024 code.

	2024 I-Codes (without IECC)	Local amendments (without IECC)	Energy Code update – 2021 to 2024
Cost impact	-$2,227 to $1,000	Neutral	$2,008 per residential unit*

*Does not include any available tax credits. i.e.: State of Colorado's available 2026 heat pump space and water heating tax credit of $1,250

Recommendation

Staff recommend adoption of the code package to update the current 2021 codes to the 2024 I-codes including local amendments.

Back up slides

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

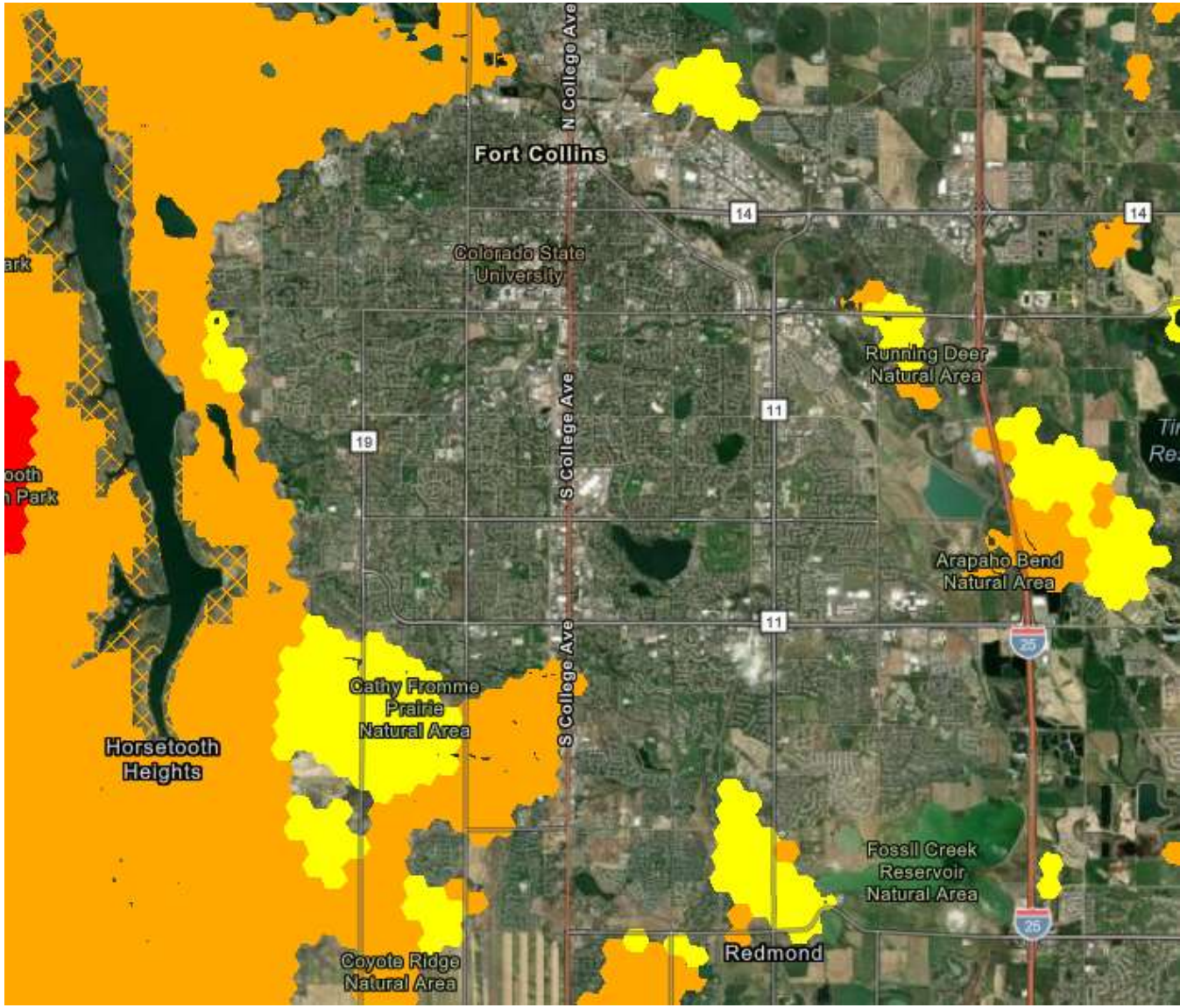
- Includes exterior hardening and material requirements, establishes a landscaping buffer area and provides ongoing maintenance requirements

- 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

EV Parking Table

TABLE 3604.5—MINIMUM PERCENTAGE OF PARKING SPACES PROVIDED IN NEW BUILDINGS THAT MUST BE ELECTRIC VEHICLE PARKING SPACES, EV READY SPACES, AND EV CAPABLE SPACES.

City of Fort Collins Occupancy Classification for EV Charging Infrastructure	EVSE - installed	EV - Ready	EV – capable
Tier 1			
Residential	10%	20%	40%
Affordable housing	Min of 1 space	15%	20%
Tier 2			
Mercantile	5%	15%	20%
Assembly	5%	15%	20%
Institutional	5%	15%	20%
Business	5%	15%	20%
Educational	5%	15%	20%
Factory	5%	15%	20%
Tier 3			
High hazard	1%	5%	15%
Storage	1%	5%	15%
Utility and misc. group	1%	5%	15%

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 (ELCO 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 outcomes using Modeled Performance

- **Meeting required Colorado 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
- Component-based (insulation, window, HVAC)
- Limited flexibility
- Less utilized path for new builds

Modeled Performance Path

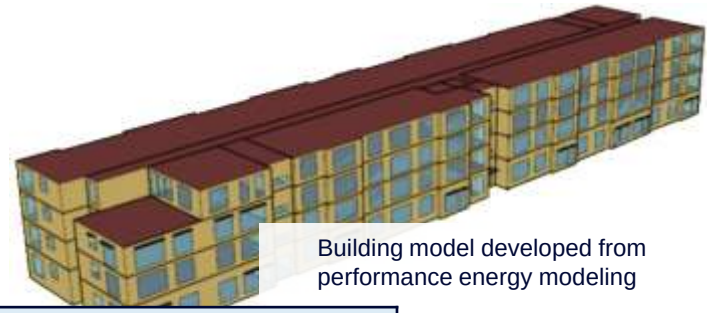
- Utilizes energy modeling / simulations
- Allow trade-offs (e.g. better windows vs less insulation)
- Energy and Carbon targets de-bias code from fossil fuel
- Emphasis on QA and verification

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 renewable energy*		
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.