



2025 Triennial Building Code Update & Reach Codes

Council Sustainability Committee

JUNE 26, 2025

Presenter:

Lindsay Hagan, Assistant Community Development Director

Tonight's Overview



- Background on the Triennial Building Code Update process
- Progression of Reach Codes
- Current Regulatory Environment
- Potential Limits on 2025 Reach Code Updates

Background



- Formally the **California Building Standards Code** (California Code of Regulations, Title 24)
- Regulates the design, engineering, construction, maintenance and facility operations, fire and life safety, energy conservation, green building, sustainability, and accessibility standards for all building occupancies in California
- Overseen by the **California Building Standards Commission**
- **Updated every 3 years** to incorporate new technologies, latest advancements, lessons learned, and enhance safety
- All cities are responsible for enforcing the State Code
- Local amendments are restricted to:
 - Administrative or procedural in nature
 - More stringent than State Code due to unique climatic, geological, topographical conditions

Composition of the Building Codes



International & National Codes



**NATIONAL
FIRE CODES®**

California State Building Codes



Local Codes

Bay Area Reach Codes



California Building Standards Code



- Often referred to as the “**California Building Code**”
- Comprised of 13 Parts:
 - Part 1: California Administrative Code
 - Part 2: California Building Code
 - Part 2.5: California Residential Code
 - Part 3: California Electrical Code
 - Part 4: California Mechanical Code
 - Part 5: California Plumbing Code
 - **Part 6: California Energy Code**
 - Part 7: *Vacant*
 - Part 8: California Historical Building Code
 - Part 9: California Fire Code
 - Part 10: California Existing Building Code
 - Part 11: California Green Building Standards Code
 - Part 12: California Referenced Standards Code
- Amendments to Part 6 require a **Cost Effectiveness Study and approval by the California Energy Commission (CEC) ~ 2-4 months**



Cost Effectiveness Study



GOAL: Ensuring a cost-effective investment that reduces energy use for the consumer

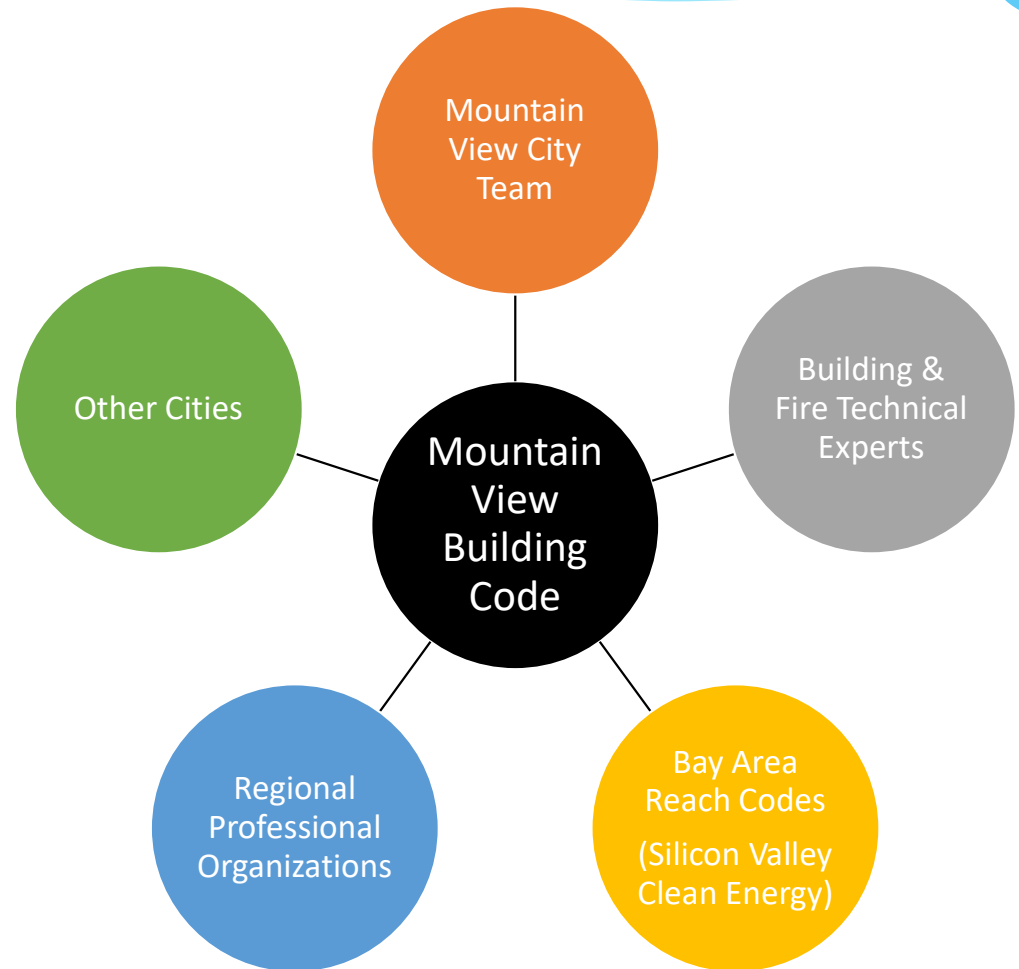
- Required for local amendments related to efficiency or conservation standards in Part 6 (Energy Code)
- Study must evaluate how many years it takes to recoup the initial cost of the requirement compared to the ongoing operational outcome
- Multiple cities may use the same Cost Effectiveness Study if local amendments align with Study
- Must demonstrate there is at least one cost-effective path to comply



Preparing Local Building Amendments



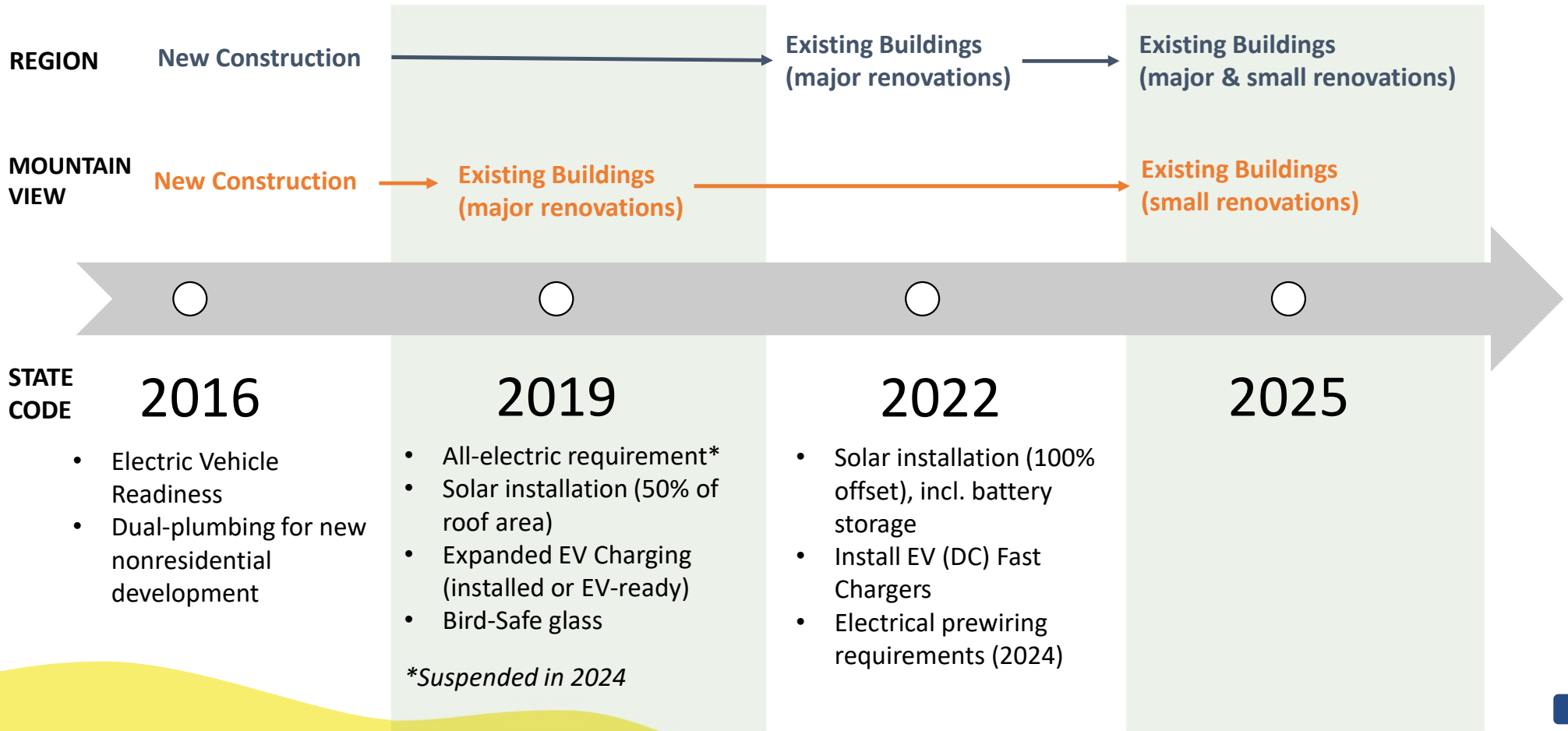
- Regional consultation
 - Silicon Valley Clean Energy
 - Regional Professional Organizations
 - Technical Experts
 - Other Cities
- City Team involved:
 - Fire Marshal
 - Code Enforcement
 - Public Services – Recycled Water
 - Land Development – Flood Control
 - Building Plan Checkers
 - Fire Protection Engineers
 - Building Inspectors
 - Chief Building Official
 - City Attorney's Office



Progression of Mountain View Reach Codes



New vs. Existing Buildings



Current Regulatory Environment



- **2023 – Bay Area Air Quality Management District (BAAQMD)**
 - Established a sale prohibition on nitrogen oxide-emitting water heaters (by 2027) and furnaces (by 2029)
- **2024 – California Restaurant Association (CRA) and City of Berkeley Lawsuit outcome**
 - City Response: Suspended all-electric requirements and adopted Phase 1 Prewiring Updates (2024)
- **2025 – Assembly Bill (AB) 306**
 - Reaction from the Southern California wildfires and housing crisis
 - Prohibits local amendments to State Building Codes by cities until June 1, 2031 that impact residential development, unless:
 - related to emergency standards, home hardening, water reuse, adaptive reuse, or directives of the State Fire Marshal
 - Recently revised to allow local amendments **until September 30, 2025**

Key Timeline on AB 306



- **June 10, 2025** – Bill was amended to adjust deadline from June 1 to Oct. 1 and other provisions
- **June 23, 2025** – Bill was amended to adjust deadline from Oct. 1 to Sept. 30 and a provision for limited new all-electric amendments during 6-year pause
- **June 24, 2025** – AB 130 released (Budget Trailer Bill), which may fast-track bill approval
- **July 1, 2025** – Deadline for Housing Committee review
- **August 29, 2025** – Deadline for Fiscal Committee review
- **September 1, 2025** – Deadline for Assembly’s recommendation to Governor
- **September 30, 2025** – Revised deadline for new local building code amendments prior to 6-year pause

This is a fast-moving bill with strict deadlines and limited interpretation leaving little opportunity for City staff to successfully adopt new Reach Code requirements in 2025 and potentially for 6 years!

Limited Potential Adoption Under AB 306



- **Staff will try but cannot guarantee** the introduction of new 2025 Reach Codes
- Temporary impact (90 days) on City Building Services
- No community outreach opportunity
- Would require 2 Council hearings in September 2025
- Following Council adoption, submit to the California Building Standards Commission (CBSC)
 - Submit any Cost Effectiveness Study simultaneously to California Energy Commission (CEC)
- *Current Interpretation:* **Need written acceptance by the CBSC by September 30**
- If it is not possible to meet deadline, staff will proceed with 2025 Triennial Code Update (without new Reach Codes)
 - Require Council hearings for Ordinance adoptions before end of 2025

Potential Considerations for 2025 Reach Code Updates



For Single-Family Homes/Duplexes

AC to Heat Pump



Expand Electrical Prewiring (Phase 2)



Energy Performance (FlexPath)



Zoning Incentive



For Multi-Family Residential and Nonresidential Development:

- None currently available
- Will be available late 2025/early 2026 for City staff review, depending on AB 306

AC to Heat Pump – Single-Family Residential



REQUIREMENT: When replacing or adding space cooling, require one of the following:

1. A heat pump space conditioner (cooling + heating) and comply with State Code requirements;

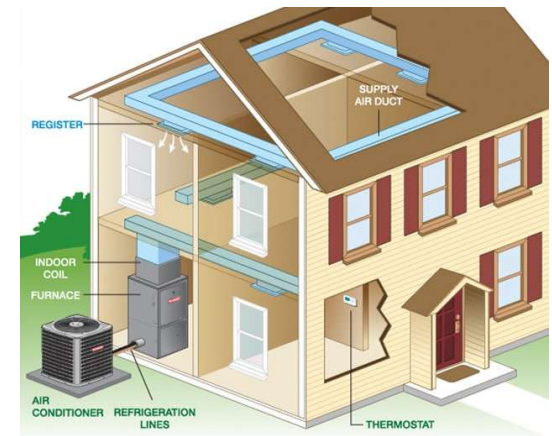
OR

2. An AC unit (cooling only) with a ducted gas furnace and do other energy improvements above the State Code (e.g. greater attic insulation, complete air sealing)



Background

- California Air Resources Board and BAAQMD restrict NOx furnace sales by 2029
- 2025 Energy Code (Part 6) includes nonresidential requirements
- 2025 CalGreen (Part 11) has a voluntary Tier 1 option to adopt
- **Requires a Cost Effectiveness Study and approval by the California Energy Commission**
- Other Cities: Portola Valley, San Mateo



Electric Readiness - Single-Family Residential



REQUIREMENT: Installation of electrical infrastructure when installing a gas appliance, including:

- Reserve breaker space
- Run conduit from main electrical panel to within 3' of appliance
- Install one of the following:
 1. upgrade existing outlet receptacle from 120 volt to 240 volt (with an extra conductor), or
 2. install an empty conduit
- Requires specific dimensional space to be shown for water heaters or space heater (compressor)
- Could apply to: kitchen remodels, water heaters, clothes dryers, space heaters, outdoor appliances
- Encourage fewer electrical panel upsizing – use certain calculation methodologies in State Code and prescribe certain electrical appliances or a home energy load management system



BACKGROUND

- Expansion from City's Phase 1 rewiring requirements (effective Jan. 1, 2025)
- Amend 2025 Energy Code (Part 6), so a **Cost Effectiveness Study and California Energy Commission approval is required**; City/SVCE reviewing if other options available
- Other Cities: San Mateo, Portola Valley, Atherton

Energy Performance (FlexPath) – Single-Family Residential



- Regulate energy performance at a set percentage (points) above the State Code, based on equipment and efficiency improvements.
- Captures new construction and major renovations (not repair, replacement, or minor work)
- **Requires a Cost Effectiveness Study and California Energy Commission approval**
- Can apply to all development types, but a Cost Effectiveness Study is only available for single-family
- ***Most challenging new Reach Code requirement to consider at this time***

FlexPath Example Project Measures

Compliance Path 1

- › Project chooses a heat pump hot water heater (12 points) + heat pump space heater (7 points) to comply
- › Total compliance cost = \$25,000

5% cost increase

Rebates available to homeowner, not included in FlexPath calculations

Compliance Path 2

- › Project chooses attic insulation (5) + windows (5) + wall insulation (3) + new ducts + duct sealing (6) Keeps existing gas furnace
- › Total compliance cost = \$28,200

5.6% cost increase

Measure	Point Value
Water Heating Package	1
Induction Cooktop	1
Heat Pump Clothes Dryer	1
Air Sealing	1
Duct Sealing	3
R-49 Attic Insulation	5
Windows	5
R-13 Wall Insulation	3
New Ducts + Duct Sealing	6
R-19 Floor Insulation	1
R-30 Floor Insulation	2
Heat Pump Water Heater	12
Solar PV + Electric Readiness	17
Heat Pump Space Heater	7



Zoning Incentive – Single-Family Residential



REQUIREMENT: In exchange for voluntary all-electric construction, grant additional floor area for single-family homes beyond current zoning minimum:

- Apply to new additions and new homes already maximizing square footage
- Grant up to a maximum amount of additional square footage, may require loosening other development standards (e.g. lot coverage, setbacks)
- Building permits would need to show all-electric construction
- May require retrofitting existing portions of home

BACKGROUND

- Stemmed from conversations with Silicon Valley Clean Energy during Phase I Updates
- City of Sunnyvale currently has incentive program
- Amend City Code Chapter 36 (Zoning) to add incentive
- **Requires Environmental Planning Commission and City Council public hearings**
 - Staff will bring to Council separate from 2025 Triennial Building Code Update



Immediate Next Steps



- **July 1-7**

- Receive new 2025 State Code to begin preparation of City amendments

- **July/August**

- City staff to work with Silicon Valley Clean Energy and TRC Companies on Reach Code development (and other code updates)

- **September**

- Present 2025 Triennial Building Code/Reach Code Ordinance(s) to Council for consideration and adoption
- Submit to California Building Standards Commission and California Energy Commission for acceptance



Thank You