# Legislation Text

**File #:** 2022-0211, **Version:** 1

**To:** Board of Supervisors
**Department or Agency Name(s):** Permit and Resource Management
**Staff Name and Phone Number:** Nathan Quarles, (707) 565-1146
**Vote Requirement:** Informational Only
**Supervisorial District(s):** Countywide

**Title:**
2022 Model Building Codes Local Workshop

**Recommended Action:**
Conduct a public workshop to consider upcoming code amendments to the California Model Building Codes and to provide direction to staff regarding the triennial building code cycle and emergency housing options.

**Executive Summary:**
Staff are seeking direction on building code options for energy conservation/consumption and for emergency housing. The triennial update to the California Model Building codes will occur in the second half of the 2022 calendar year. An item of significant interest is scheduled for November 1, 2022, for the Board to consider the model building codes with final adoption scheduled for November 8. The model code adoption cycle provides an opportunity to make local amendments, should they be desired.

The second area staff are seeking direction is emergency housing options. There are a wide variety of housing options available ranging from the traditional multi-family structures, single-family dwellings, or on-site constructed structures, to factory-built/manufactured homes, to recreational vehicles to “tiny homes” to emergency sleeping cabins. Yurts and tents are temporary housing.

**Discussion:**
**Building Code Amendments for the 2022 Code Cycle**
**Model Codes:**
The International Code Council (ICC) revises and publishes model building codes on a three-year cycle. In about a six-month lag after ICC publication, the State of California, through a variety of its agencies, adopts the ICC codes with amendments also in a three-year cycle. The model codes include main branches of construction such as the building, fire, residential, plumbing, mechanical, and electrical codes. Also included are the model codes dealing with energy consumption and efficiency, green building and waste reduction, historic buildings and existing buildings. The formal names include the California Building Code, the California Fire Code, etc.

Staff anticipates the California Building Standards Code will be published on July 1, 2022. Local jurisdictions are obligated to implement State codes, as adopted by the State, within 180 days after State publication. Local amendments that are equal to or more stringent than State provisions can be made; however, local jurisdictions cannot relax State codes. State’s model codes go into effect January 1, 2023, regardless of local

amendments. Amendments or changes to the model codes are administered by the State's Building Standards Commission. Local amendments can be made at any time, provided the amendments be duly adopted by the local jurisdiction and filed with the State's Building Standards Commission.

During the 2020-2023 code cycle, there has been interest in local jurisdictions adopting energy codes - REACH codes - that exceed the model energy codes. At the Board's November 18 2019 consideration of the current code, the Board opted not to require all-electric REACH codes due to the added financial burden on fire survivors already challenging construction costs. . The California Energy Commission administers a separate process for approval of modifications or exceedances of energy codes.

REACH codes can be reviewed by local jurisdictions in concert with the State's model codes or at any time chosen by the local jurisdiction. There is no mandate to adopt REACH codes, nor is there a mandate as to when to adopt REACH codes. Local jurisdictions have tremendous flexibility on the content and timing of REACH codes, provided any amendments meet the minimum of the 2022 California Energy Code.

**Model Code Changes:**
Each code cycle informs the next one. Lessons learned from this cycle include:

- Making swimming pool safety regulations mandatory (CRC);
- Encouraging the use of heat pumps as a more efficient method of heating and cooling structures (CEC);
- Requiring new single family buildings to be energy storage ready, heat pump ready and electric ready (heat pumps are mandatory for climate zones 3, 4, 13, and 14; Sonoma County is within climate zones 1 and 2);
- Requiring that other building types, such as schools, office buildings, retail shops, warehouses, groceries, etc.), have photovoltaic systems and battery storage systems installed with new construction

**REACH Codes - General:**
Whether discussing energy production or efficiency, green building codes and waste reduction or reuse, building codes and safety or fire codes and fire resiliency, staff must consider the cost of compliance and the cost-benefit of the new codes.

Building codes to protect structures during earthquakes provide a good example. Current building codes are designed to prevent catastrophic structural failure - collapse - to minimize fatalities. Codes are not intended to prevent structural damage. While occupants may survive a significant earthquake, structures will likely sustain structural damage. The county could decide to mandate seismic safety above State model code requirements to ensure structures sustain only potentially minimal damage. Construction cost increases while benefits in structural damage reduction/replacement accrue

**REACH Codes - Energy:**
Current energy codes require single-family buildings to have photovoltaic (PV) systems sized to a published formula. The 2022 energy codes requires PV and battery storage systems for apartments, businesses and other types of structures; new single family buildings to be energy storage ready, heat pump ready and electric ready.

The county may adopt REACH code options such as:

1) 100% electric versus electric-ready residences; 2) PV systems sized to match estimated electrical demand versus a current published formula; and 3) Mandatory heat pumps versus their encouraged use.

These provisions add to the cost of construction; however, costs can be recovered over time. Many assumptions and variables go into evaluating costs and savings. Some of these include the number of people in a given house, their behavior, the orientation of the dwelling as related to the sun, shading from trees and other structures, cost and longevity of electric appliances versus gas appliances, and the cost of the utility connection for gas services (a savings).

**Building Regulations for Tiny Homes and Emergency Housing**

**Tiny Homes**

Tiny homes can mean different things to different people. There are roughly a dozen defined housing types within the model building codes and state's health and safety code. These range from congregate living, individual dwellings to recreational vehicles to park trailers to sleeping cabin and sleeping units. Each type of structure is regulated differently and by various agencies. The three main agencies include a local jurisdiction, the State Department of Housing and Community Development and the Department of Motor Vehicles. Essentially, if a structure is being constructed there is an agency and process to evaluate the safety of that structure or unit.

**California Building Code, Appendix O, Emergency Housing**
**California Residential Code, Appendix X, Emergency Housing:**

In August 2020, in response to a declared shelter crisis, the Board adopted amendments to the California Building Code (Appendix O) and to the California Residential Code (Appendix X). These two appendices allow options to traditional housing, during times of a declared shelter crisis.

Traditional housing options include residences, apartments, and congregate housing. These housing types are constructed on-site and are commonly referred to as "stick built".

Other traditional housing options include factory-built and manufactured homes. While not constructed on-site, there is some amount of on-site construction required to place these structures on their sites, primarily foundations and utility connections.

Appendix O and Appendix X include various types of temporary housing to be occupied only during a declared state of emergency, local emergency or shelter crisis. These include sleeping cabins, transportable housing units (recreational vehicles, park trailers, mobile homes, select manufactured homes), tents and membrane structures.

The August 2020 building code adoption included amendments to allow use of Appendix O and Appendix X for housing projects owned, operated, erected, or constructed by, for or on behalf of the County of Sonoma on land owned or leased by the County of Sonoma. At the time, the County was addressing a large number of homeless encampments and was intent on providing government-sponsored beds for these individuals. Nearly two years later, the housing crisis has not abated and additional solutions are being sought.

One option available for consideration may be to expand the application of Appendices O and X to private property. Staff are reviewing legislative history to determine if State law would sanction this option.

**Additional Considerations:**
Other considerations to allowing alternative housing include land use, water/wastewater, and fire safe regulations.

**Land Use:**
Land use zoning regulations limit the number of dwellings on a parcel. For example, one primary dwelling and one accessory dwelling unit are allowed on most residentially zoned parcels. Many of the alternative units detailed above are not considered dwellings as they are lacking one or more key components of a dwelling. As such, they might be considered an accessory structure, such as a guesthouse or a miscellaneous residential occupancy (such as an art studio, recreational room, media room) or a pool house. Most accessory structures are "stick built", permanent and require fire sprinklers due to being a residential occupancy. It is not a good fit to call these temporary housings accessory structures.

Adding people to a parcel in temporary housing will increase the demand on the water system and on the wastewater system. The question becomes how does the County treat temporary housing units relative water supply and wastewater treatment.

**Water Supply:**
For permanent dwellings, current regulations treat each dwelling as one connection. Depending on the water availability zone, adding dwellings has no additional regulations (zone 1 and 2) to requiring a well-water yield test (zone 3 and 4).

**Wastewater:**
For permanent dwellings, current regulations evaluate the number of bedrooms as a surrogate for the amount of wastewater that is generated - 120 gallons per bedroom per day. This value is multiplied by the total number of bedrooms which is then used to size/design an on-site wastewater treatment system.

In the scenario of adding emergency housing units to a parcel that has an existing dwelling, an existing well and an existing septic system, the water supply and wastewater capacity should be evaluated. The question that comes up is how to treat an emergency housing unit relative to water demand and wastewater generation.

**Current Temporary Housing:**
The County currently allows temporary housing in three scenarios:  housing during construction; caregiver housing, and farm-worker housing. The County does allow a fourth instance for fire rebuilding. The most common housing unit is a mobile home, travel trailer or recreational vehicle. The County requires connection to a water supply and connection to an on-site septic system for the first three scenarios and does allow a hold and haul option for wastewater for the fire rebuild scenario.

One option for consideration is to expand the use of temporary housing beyond the above scenarios.

**California Fire Code:**

Depending on the occupancy, a fire suppression system may or may not be required. Earlier, pool house and guesthouses were mentioned. These are a residential occupancy and require a fire suppression system.

However, it is not exactly clear what occupancy these temporary housing units are considered. Clearly, they are being occupied by humans. They are being used for sleeping and day use. As such, they are a residential use, but they are temporary.

Appendix O and Appendix X does not state that fire and life safety measures shall be determined and enforced by the enforcing agency (sections O103.4 and AX103.4, respectively). In essence deferring means of egress, fire separation, fire sprinklers, smoke alarms and carbon monoxide alarms to the local jurisdictions.

Temporary is defined in the building code as 180 days or less. Please refer to Attachment 1 for additional commonly use definitions. The homeless state of emergency was declared in October 2018, nearly four years ago. There are no indicators that the homeless state of emergency will be abating anytime soon. Any authorized emergency housing units will be on the landscape well beyond the 180-day definition of temporary. Fire suppression systems and other fire life safety measures need to be part of the discussion.

In addition to the California Fire Code, the California Department of Forestry and Fire Protection's (Board of Forestry) Fire Safe Regulations apply in the State Responsibility Area. This covers over 60% of the unincorporated area of the County. The Board of Forestry's Fire Safe Regulations are set forth in 14 California Code of Regulations Section 1270 et seq. These regulations involve emergency access and egress, signing and building numbering, emergency water standards and fuel modification standards throughout the State Responsibility Area. The Board of Forestry has been in the process of updating these regulations for over two years. Members of the public can observe these Board of Forestry meetings and comment on the State's proposed regulations by registering on the website: <https://bof.fire.ca.gov/>. Once the Board of Forestry has finalized its regulations update, County staff will return to the Board of Supervisors to ensure continued compliance with the new State regulations.

**Recommendations:**
Staff seeks direction on conducting additional research, workshops, public outreach and/or producing draft regulations for 1) model building code amendments and/or 2) emergency housing options.

**Strategic Plan:**
This item directly supports the County's Five-year Strategic Plan and is aligned with the following pillar, goal, and objective.

> **Pillar:** Healthy and Safe Communities
> **Goal:** Goal 4: Reduce the County's overall homeless population by 10% each year by enhancing services through improved coordination and collaboration.
> **Objective:** Objective 5: Continue to collaborate with local partners, including Continuum of Care, to advance planning and policies to address homelessness.

**Prior Board Actions:**
04/21/2020: The Board adopted Resolution 20-0314
08/18/2020: The Board adopted Resolution 20-0275 amending Chapter 7
12/02/2019: The Board adopted Resolution 0570

12/02/2019: The Board adopted Resolution 6295
12/02/2019: The Board adopted revisions amending Chapter 7, 7A, 7C and 7D
11/01/2016: The Board adopted revisions amending Chapter 7, 7A, 7C and 7D
11/01/2016: The Board adopted Resolution 16-0417
10/20/2015: The Board adopted revisions amending Chapter 7
11/05/2013: The Board adopted revisions amending Chapter 7 and 7D2
11/05/2013: The Board adopted revisions amending Chapter 13
11/02/2010: The Board adopted revisions amending Chapter 7 and 7A
05/04/2010: The Board adopted revisions amending Chapter 13

**FISCAL SUMMARY**
**Narrative Explanation of Fiscal Impacts:**
Not Applicable

**Narrative Explanation of Staffing Impacts (If Required):**
Not Applicable

**Attachments:**
Attachment 1: Housing Definitions
Attachment 2: Staff PowerPoint

**Related Items "On File" with the Clerk of the Board:**
Not Applicable