



**Mayor Libby Schaaf and Councilmembers Dan Kalb & Sheng Thao  
Construction Innovation and Expanded Housing Options  
Proposed Ordinance**

**Draft 5-3-21**

---

## **EXECUTIVE SUMMARY**

Oakland Mayor Libby Schaaf, District 1 Councilmember Dan Kalb, and District 4 Councilmember Sheng Thao are developing legislation to promote construction innovation in Oakland and expand the types of housing options available to residents to reduce the cost of housing in the city. The ordinance would update the City's zoning and building regulations to:

1. Allow residential occupancy of **recreational vehicles and tiny homes on wheels**;
2. Allow **mobile homes and manufactured homes**;
3. Establish density and open space regulations for smaller **efficiency dwelling units**;
4. Establish height regulations for **modular construction**; and
5. Establish flexible requirements for **tiny houses** on permanent foundations and certain **alternative building materials**.

## **BACKGROUND**

### *Housing Costs*

Oakland has a housing affordability crisis. Since 2011, apartment rents in the city have increased 72 percent while median incomes have remained relatively unchanged.<sup>1</sup>

High construction costs contribute to the high cost of housing in the Bay Area. Construction costs in the Bay Area have risen 119 percent in the past decade.<sup>2</sup>

Innovative and alternative forms of housing construction have the potential to reduce construction costs so that housing can be provided at a lower cost.

### *Relevant City Policies*

In 2014, the City Council adopted the 2015-2023 Housing Element of the Oakland General Plan which contained strategies to improve housing affordability including supporting manufactured and factory-built housing.

In 2016, the Oakland Housing Cabinet, a task force comprised of the Mayor, City Councilmembers, affordable and market-rate housing developers, housing policy experts,

---

<sup>1</sup> Bay Area Equity Atlas. <https://bayareaequityatlas.org/>

<sup>2</sup> Terner Center for Housing Innovation, UC Berkeley. The Hard Costs of Construction: Recent Trends in Labor and Materials Costs for Apartment Buildings in California (March 2020). <https://ternercenter.berkeley.edu/hard-construction-costs-apartments-california>



## Construction Innovation and Expanded Housing Options – Proposed Ordinance **Draft 5-3-21**

community advocacy organizations, and City staff, released the report *Oakland At Home*. The report contained recommended strategies to improve housing affordability including promoting innovative forms of cost-saving construction.

In 2018, the City Council passed Resolution No. 87129 C.M.S. to encourage development of expanded housing options such as tiny homes, shipping container homes, manufactured housing, recreational vehicles, and trailers.

### ***Research***

In 2018, the City received technical assistance from the Metropolitan Transportation Commission and Association of Bay Area Governments to promote the use of innovative forms of cost-saving construction. The work, lead by consultant Urban Planning Partners, resulted in a [research report issued in March 2020](#) that identified barriers and solutions to utilizing innovative construction. The report recommended, among other things, that the City update its zoning and building regulations to increase flexibility and encourage innovative and alternative forms of construction. The research won an [Award of Excellence from the Northern California Chapter of the American Planning Association](#) and informed the proposed ordinance.

## **SUMMARY OF PROPOSAL**

### **1. Vehicular residential facilities – recreational vehicles and tiny homes on wheels**

**Issue:** Residential facilities built on a vehicle chassis, such as recreational vehicles and tiny homes on wheels, can be a lower-cost housing option because they tend to be smaller than other forms of housing and are often built in factories. The zoning regulations of the Oakland Planning Code currently require all residential facilities to be installed on a permanent foundation. Structures on a vehicle chassis are currently prohibited for residential purposes unless they are on property owned or leased by the City for emergency housing for the homeless or comply with the RV Pilot Program created by the City in 2020 to allow no more than one recreational vehicle on vacant land.

**Proposal:** The ordinance would amend the Oakland Planning Code and various other related City codes to allow residential occupancy of recreational vehicles and tiny homes on wheels on private property. This would be accomplished by creating a new land use category in the zoning regulations called “Vehicular Residential Facilities.” ***See the attached table for more information on the proposal for these facilities.***



## **Construction Innovation and Expanded Housing Options – Proposed Ordinance**

### **Draft 5-3-21**

## **2. Mobile homes and manufactured homes**

**Issue:** Mobile homes and manufactured homes can be a lower-cost housing option because they are constructed in factories. The zoning regulations of the Oakland Planning Code currently prohibit mobile homes and manufactured homes, unless they are installed on a permanent foundation.

**Proposal:** The ordinance would amend the Oakland Planning Code to allow mobile homes and manufactured homes. They would be treated the same as single-family homes and be subject to the same zoning and design standards as other single-family homes.

## **3. Efficiency dwelling units**

**Issue:** The zoning regulations of the Oakland Planning Code currently distinguish different types of living units, e.g., regular dwelling units (standard units with a kitchen), efficiency dwelling units (studio units with a kitchen and under 500 square feet in area), and rooming units (units without kitchens, such as those found in a single-room occupancy [SRO] hotel). Smaller units, including efficiency dwelling units, typically cost less to build and are more likely to be provided at a lower cost. The Planning Code sets limits on the allowable residential density by zoning district, but only contains regulations for regular dwelling units and rooming units; there are no density or open space standards for efficiency dwelling units, which discourages their use.

**Proposal:** The proposed ordinance would amend the Oakland Planning Code to establish density and open space standards for efficiency dwelling units. The standard would vary by zoning district and be equal to the existing density and open space standard for rooming units. The maximum size of efficiency dwelling units would be reduced from 500 square feet to 400 square feet to align them with the smaller sizes of rooming units.

## **4. Height limit for modular construction**

**Issue:** The zoning regulations of the Oakland Planning Code set the height limits for new construction by zoning district. These limits are based on typical floor-to-floor height measurements of conventional buildings constructed on-site. Volumetric modular housing constructed off-site in a factory typically contains stacked six-sided modules resulting in a greater floor-to-floor measurement compared to conventional on-site construction, but is subject to the same height limits as conventional buildings.

**Proposal:** The ordinance would amend the Oakland Planning Code to increase the height limit for volumetric modular buildings by one foot per story.



## Construction Innovation and Expanded Housing Options – Proposed Ordinance

### Draft 5-3-21

#### 5. Special standards from the California Building Standards Code for tiny houses and alternative building materials

Issue: The California Building Standards Code contains the construction codes and standards for the State of California and applies to all jurisdictions in the state, which adopt the state code locally. Oakland adopted the state code locally as the Oakland Building Construction Code. The state code contains various appendices – some are mandatory for local jurisdictions and some are voluntary. Some of these appendices contain standards to enable innovative construction and expanded housing options, however, they have not been adopted locally by the City.

Proposal: The ordinance would amend the Oakland Building Construction Code to incorporate the following state code appendices:

California Residential Code				
Appendix	Title	Mandatory Adoption	Voluntary Adoption	Notes
Q	Tiny Houses	X		Applies to tiny houses (400 sq. ft. or less) on permanent foundations.
R	Straw-Clay Construction		X	Applies to residential construction using light straw-clay (“adobe”).
S	Strawbale Construction	X		Applies to residential construction using strawbales.



## Construction Innovation and Expanded Housing Options – Proposed Ordinance Draft 5-3-21

### Summary Table for New Regulations Pertaining to Residential Vehicular Facilities

Topic	Proposal
Overview	Allow residential occupancy of one or more recreational vehicles or tiny homes on wheels on vacant or developed private property (not currently allowed).
Zoning category	Create a new land use category in the zoning regulations for “Vehicular Residential Facilities.”
Types of structures included	Recreational vehicles: motorhomes and trailers   Tiny homes on wheels 
Definition	Recreational vehicles and tiny homes on wheels would be defined as recreational vehicles under state law. Recreational vehicles are defined in <a href="#">California Health and Safety Code Section 18010</a> .
Where allowed	Vehicular Residential Facilities would be allowed in all zoning districts where residential facilities are currently allowed.
Density	Each Vehicular Residential Facility would be considered 1 residential unit and would be subject to the same density restrictions of the underlying zone.
Relationship to accessory dwelling units (ADUs)	Vehicular Residential Facilities would not be subject to the state ADU laws because state law does not consider them ADUs. However, if a Vehicular Residential Facility meets the requirements otherwise applicable to ADUs, it may be considered an ADU under Oakland’s ADU rules.
Minimum required setbacks	No requirement (see separation and site design requirements below)
Minimum required separation	6 feet minimum required between one Vehicular Residential Facility and another Vehicular Residential Facility or a building on the same lot or adjacent lot.
Site design requirements	No special site design requirements in residential zones.



## Construction Innovation and Expanded Housing Options – Proposed Ordinance

### Draft 5-3-21

	In commercial zones and special districts, Vehicular Residential Facilities must be set back 30' from the street or located behind a building.
Ground surface	All-weather surface required (e.g., asphalt, concrete, pavers, decomposed granite, gravel)
Off-Street Parking	Self-propelled Vehicular Residential Facilities (e.g., motorhome): No requirement Other Vehicular Residential Facilities (e.g., trailer, tiny home on wheels): Same requirement as ADUs (not required within ½-mile of a transit stop)
Habitability	Vehicular Residential Facilities must comply with the standards of <a href="#">California Civil Code Section 1941.1</a> , and the occupant must have access to a toilet and bathing facilities under their control.
Utility connections	1 Vehicular Residential Facility: Connections to municipal utilities, with the necessary permits, are required unless the applicant demonstrates adequate access to on-site alternatives. Examples of allowable on-site alternatives include solar and wind power and access to a bathroom in an on-site building that is connected to the municipal water and sewer systems. Access to off-site utilities, or on-site facilities serviced by off-site companies (e.g., water delivery service, sewage pumping service, sewage dumping off-site), is not allowed. Fuel-powered generators are not allowed. 2+ Vehicular Residential Facilities: Connections to municipal utilities, with the necessary permits, are required.
Health and safety certification	Vehicular Residential Facilities must comply with the National Fire Prevention Association (NFPA) 1192 standards. The structure can be built in a certified factory or certified by a third-party inspector. The structure must bear a label or insignia indicating compliance.
Zoning approval process	1-4 Vehicular Residential Units: Design review exemption – no public notice, over-the-counter staff approval (similar to an ADU) 5+ Vehicular Residential Units: Regular Design Review – discretionary review, public notice, staff approval, appealable to the Planning Commission (similar to a new house)
Building permit	Vehicular Residential Facilities are considered vehicles, not buildings, and are not regulated under the Building Code. No building permit would be required.
Utility permits	Electrical and plumbing permits would be required for utility connections.
Inspections	All Vehicular Residential Facilities would require an initial inspection upon installation. Vehicular Residential Facilities with utility connections would also require an inspection under the utility permits.
Approximate City approval/permitting fees	1 Vehicular Residential Facility without utility connections: \$294 zoning approval (design review exemption) \$324 installation inspection



## Construction Innovation and Expanded Housing Options – Proposed Ordinance

### Draft 5-3-21

	<p><u>\$56 address fee</u> \$674 approximate total</p> <p>1 Vehicular Residential Facility with utility connections: \$294 zoning approval (design review exemption) \$217 plumbing permit \$217 electrical permit \$324 installation inspection <u>\$56 address fee</u> \$1,108 approximate total</p> <p>2-4 Vehicular Residential Facility (utility connections required): \$294 zoning approval (design review exemption) \$217 plumbing permit \$217 electrical permit \$324 installation inspection <u>\$56 address fee</u> \$1,108 approximate total</p> <p>5+ Vehicular Residential Facilities (utility connections required): \$3,549 zoning approval (regular design review) \$(varies) plumbing permit (depends on number of connections) \$(varies) electrical permit (depends on number of connections) \$465 installation inspection <u>\$56 address fee</u> \$4,070 approximate total + pluming &amp; electrical permits</p> <p><i>Note: Additional City permits/fees may apply depending on the site and project. The fees above do not include fees that may be charged by other agencies.</i></p>
Recreational vehicle parks	Two or more Vehicular Residential Facilities on a site would be considered a “Special Occupancy Park” under state law and would need to comply with the state RV park rules contained in the Special Occupancy Parks Act and the Special Occupancy Park Regulations. New parks would be required to obtain a permit from the state to construct and operate after obtaining approval from the City of Oakland. Sites with only one Vehicular Residential Facility, and sites with two or more Vehicular Residential Facilities where no rent is paid to occupy the space, are not subject to the state requirements for parks. Pursuant to <a href="#">California Health and Safety Code Section 18865.4</a> , the proposed ordinance would also exempt RV parks operated by nonprofit entities from the state



## Construction Innovation and Expanded Housing Options – Proposed Ordinance

### Draft 5-3-21

	requirements for parks. More information about state RV park rules can be found at: <a href="https://www.hcd.ca.gov/manufactured-mobile-home/mobile-home-parks/laws-and-regulations.shtml">https://www.hcd.ca.gov/manufactured-mobile-home/mobile-home-parks/laws-and-regulations.shtml</a>
Blight, nuisance, and maintenance standards	The Oakland blight, nuisance, and maintenance standards would apply. The blight standards would change to allow residential occupancy of a recreational vehicle (which is currently prohibited). The maintenance standards regarding room dimensions would be removed for Vehicular Residential Facilities.
Development impact fees	Vehicular Residential Facilities would not be subject to the Affordable Housing Impact Fee, Transportation Impact Fee, or Capital Improvements Impact Fee.
Tenant protections	Vehicular Residential Facilities would be considered “new construction” and therefore exempt from the City’s Rent Adjustment Ordinance and Just Cause for Eviction Ordinance. They would be covered by the Tenant Protection Ordinance.
Existing RV Pilot Program	The existing RV Pilot Program, created in 2020, allows 1 recreational vehicle on a vacant lot with an annual permit. That program would remain unchanged.
Existing emergency housing standards	Vehicular Residential Facilities are currently allowed for emergency housing for the homeless on City-owned or leased property under the City and State Emergency Housing Standards. Those standards would remain in effect.