



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** Chris Burton  
Erik L. Soliván  
Raymond Riordan

**SUBJECT:** See Below

**DATE:** September 3, 2024

Approved

Date:

9/12/24

**COUNCIL DISTRICT:** Citywide

**SUBJECT:** Soft Story Seismic Retrofit Ordinance

## **RECOMMENDATION**

Approve an ordinance amending Title 17 of the San José Municipal Code to add Chapter 17.41 to require seismic retrofit of certain wood-frame target story residential buildings effective April 1, 2025.

## **SUMMARY AND OUTCOME**

On September 20, 2021, the Federal Emergency Management Agency (FEMA) awarded the City a Hazard Mitigation Grant that is overseen by the California Governor's Office of Emergency Services. Subsequently, staff developed a work plan and engaged with a structural engineering consultant to conduct an analysis of potential soft story buildings in San José. The study found approximately 3,500 buildings in San José that may be impacted by the proposed ordinance. These properties house approximately 72,000 people. Failure of these soft story buildings in the event of a high-magnitude earthquake could result in a devastating loss of life and property and impede the City's disaster recovery.

In developing a program to address seismic retrofit of certain wood-frame target story residential buildings, staff reviewed the consultant's research from other cities in the Bay Area and in the state. Additionally, staff analyzed several policy considerations including size and age of subject buildings, retrofit costs and funding options, permitting and inspection processes, impact of retrofit costs on rents, and potential impacts of retrofit construction to tenants. Staff has also conducted outreach and engagement to property owners and residents and has incorporated feedback into the proposed ordinance and implementation program.

City Council adoption of the proposed ordinance would require retrofitting of all qualified soft story buildings that were built pre-1990, are multi-storied, and contain three or more dwelling units. Upon City Council adoption, staff will begin implementation of the program with a notification and education phase for property owners and residents that includes information on compliance groups and schedules and tenant coordination plans. Staff will also finalize the financing program and engage with property owners and residents.

## **BACKGROUND**

With the high risk of earthquakes in the Bay Area, retaining housing is crucial to expediting and ensuring effective recovery. Limiting catastrophic housing damage and allowing residents to stay in their homes not only helps people who may lack the resources to recover from a disaster quickly but also keeps communities intact. In the aftermath of natural disasters, the recovery of the region's economy is interdependent with the recovery of the region's housing. If residents can stay in their homes, they will be better able to participate in the rebuilding of their neighborhoods and cities, go to work and school, support local businesses, and improve the recovery trajectory of the entire region. Re-allocating limited City resources to response and recovery activities may be reduced so that there is continuity of regular community services.

The City of San José adopted building standards to ensure that newly constructed buildings can withstand most seismic events. However, older buildings in San José were built to previous building code standards that were less stringent with respect to seismic safety. One type of seismically collapse-prone building is commonly known as "soft story." The term "soft story" refers specifically to older, wood-frame multi-story buildings with an especially weak, flexible, or otherwise vulnerable ground story. Often, the soft story deficiency is indicated by large openings in the ground story walls, typically due to garage doors, open parking stalls, or large storefront windows. These buildings built before current building codes have ground stories that tend to collapse when shaken hard enough.

A major earthquake could cause significant impacts in San José in terms of loss of life, response, and recovery costs. Soft story buildings pose risks that may be disastrous as they can:

- Threaten the lives of many residents;
- Potentially start fires that spread to nearby buildings;
- Cause substantial financial loss to building owners and tenants;
- Displace people or force tenant relocation; and
- Delay recovery of housing and community services citywide.

Table 1 provides a history of City Council’s direction to staff for the development of a retrofit ordinance and implementation program.

**Table 1: Soft Story Seismic Retrofit Program Development Chronology**

Date	Action
2014	City Council directed staff to explore ways to incentivize soft story building retrofits.
2017	City Council ranked development of a soft story retrofit program as the City’s overall eighth policy priority.
2018	City submitted \$6 million <i>Hazard Mitigation Grant Program</i> application to California Governor's Office of Emergency Services.
2019	Grant application forwarded to FEMA.
2021	Phase 1 grant (ordinance development) awarded after completing requested modifications and re-submitting grant application.
2022	City entered into a consultant agreement for a soft story inventory analysis and for assistance with mandatory ordinance development and program implementation.
2023	City begins outreach with building/property owners and residents. Research is conducted on funding mechanisms and similar programs in San Francisco, Oakland, and Los Angeles. In August 2023, the City applied for an additional \$25 million FEMA grant.

In September 2021, the City was awarded a grant from .FEMA through the California Governor’s Office of Emergency Services’ Hazard Mitigation Grant Program. This grant provides funds to develop an inventory of potential properties that may be considered as soft story properties. The scope also includes the development of a mandatory citywide Soft Story Seismic Retrofit Ordinance, outreach and engagement with property owners and tenants, implementation of a compliance program, and the establishment of a rebate pilot program (financing program) to help defray the cost of retrofitting for building owners.

City staff conducted a procurement process in summer 2022 to hire a consultant with expertise in structural and/or civil engineering and entered into an agreement with David Bonowitz, Structural Engineer, in October 2022. Staff has worked with the consultant to develop an inventory and analysis of potential soft story properties in San José, review existing seismic risk reduction policies, and conduct cost-benefit analysis.

On August 15, 2023, City Council adopted a resolution authorizing the City Manager or designee to submit a second application to the California Governor’s Office of Emergency Services Hazard Mitigation Grant Program in the amount of \$25,000,000. This grant, if awarded, will expand the City’s ability to offer rebates to additional property owners to complete seismic retrofits of their properties. Staff has not yet received notification about a grant award.

## **ANALYSIS**

Throughout the development of the proposed ordinance program, staff followed three guiding principles:

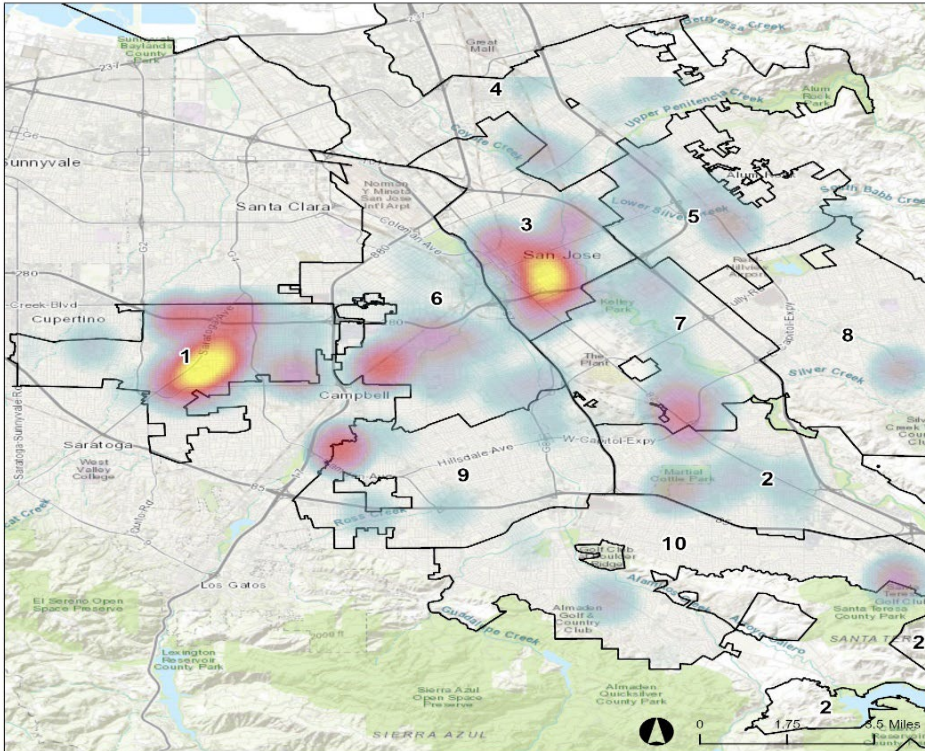
- 1) Health and safety of residents;
- 2) Equity and inclusion of vulnerable and disadvantaged residents and property owners; and
- 3) Cost avoidance for mass care and shelter in the event of an earthquake.

The proposed ordinance is intended to reduce earthquake-related deaths and injuries, improve the durability of the existing housing stock, particularly affordable units, facilitate post-earthquake emergency response, improve community stability, minimize displacement during retrofits and after an earthquake, and reduce the economic impacts of a damaging earthquake.

Preserving health and safety during an earthquake is critical. Reducing the number of displaced individuals who require mass care and shelter enables neighborhoods and the entire City to recover more quickly. The cost of mass care and shelter is estimated at \$222 per person per day, which equates to \$666,000 for 100 people per month.

### **Existing Building Inventory**

San José's permanent housing stock comprises approximately 206,000 buildings containing about 351,000 units. Of those, about 17,000 buildings (156,000 units) are apartment and condominium buildings containing three or more units. Buildings constructed before 1990 with a soft story pose a widely recognized seismic risk to tenants, owners, and the City. Based on a statistical sampling, San José has between 2,600 and 3,600 such buildings, containing between 18,000 and 25,000 units. This represents approximately five to seven percent of the total housing stock. In some neighborhoods, the pre-1990 soft story buildings comprise up to 20% or more of the local housing stock, comparable with other Bay Area cities that have already adopted mandatory soft story retrofit ordinances. The **Attachment** – Background Studies and Policy Recommendations is a summary of the consultant's report on the inventory findings. The heat map below shows the distribution of soft story properties in San José.



Relative distribution of units in suspected wood-frame target story buildings (Pre-1990, 3 or more unit buildings, up to 25,000 units)



Sources: David Bonowitz, S.E., 2023; Biggs Cardosa Associates, 2023; City of San Jose, 2023; Strategic Economics, 2023.

### Subject Buildings

Table 2 shows the breakdown of the soft story buildings by age, size, and ownership type. Each of the four rows represents the scope of a possible mitigation program. For example, the top row shows the smallest program, which would consider only the oldest (pre-1978) and largest (five or more units) buildings and would ignore newer and smaller buildings even if they are also collapse-prone. The bottom row includes all the buildings that the City considers likely to have soft story deficiencies; this row corresponds to the range of 2,600 to 3,600 buildings mentioned above.

**Table 2: Potential Soft Story Buildings by Age, Size, and Ownership Type**

<b>Buildings</b>	<b>Apartments</b>	<b>Condominiums</b>	<b>Total</b>
Pre-1978 5+ units	949 – 1,273 buildings 9424 – 12,063 units	103 – 222 buildings 700 – 1,502 units	1052 – 1495 buildings 10,124 – 13,565 units ~40,000 people*
Pre-1990 5+ units	1,118 – 1,441 buildings 10,716 – 13,355 units	523 – 831 buildings 3,382 – 5,729 units	1,641 – 2,272 buildings 14,098 – 19,084 units ~56,000 people
Pre-1978 3+ units	1487 – 2,008 buildings 11,467 – 14,773 units	160 – 355 buildings 929 – 1,990 units	1,647 – 2,363 buildings 12,396 – 16,763 units ~49,000 people
Pre-1990 3+ units	1,665 – 2,185 buildings 12,792 – 16,098 units	901 – 1,392 buildings 5,391 – 8,508 units	2,566 – 3,577 buildings 18,183 – 24,606 units ~72,000 people

\* Average Household: 2.92 per unit

### Learning from Other Cities

The City’s consultant researched soft story retrofit programs in cities in the Bay Area and in the state. Table 3 provides a summary of comparison cities.

**Table 3 – Summary of Retrofit Programs in Comparison Cities**

<b>City</b>	<b>Program Type</b>	<b># of Stories</b>	<b># of Units</b>	<b>Year built</b>	<b>Pass-through Percentage</b>	<b>Pass-through Period</b>
San Francisco	Mandatory	3+	5+	Pre-1978	100%	20 years
Los Angeles	Mandatory	2+	4+	Pre-1978	50%	10 years +
Oakland	Mandatory	2+	5+	Pre-1991	70%	25 years
Berkeley	Mandatory	2+	5+	Pre-1978	100%	8 years – applies only to owners of up to 12 units
Hayward	Mandatory Screening only	2+	3+	Pre-1979	N/A	N/A
Mountain View	Voluntary (No program)	TBD	TBD	Pre-1980	By # Units 90% (1-5) 75% (6-20) 50% (>20)	20 years

The Cities of Berkeley and Oakland received FEMA grant funding for their soft story retrofit programs after their ordinances were already in effect. The City of Berkeley offers eligible homeowners up to \$13,000 to construct retrofits. City of Oakland's ordinance was initially voluntary, and it offered grants covering 75% of retrofit costs. Due to the low level of property owner participation, City of Oakland revised its ordinance to be mandatory.

## **Proposed Soft Story Seismic Retrofit Ordinance**

### *Effective Date of Ordinance*

The effective date for the proposed ordinance is set at April 1, 2025. The six-month period from City Council action has been designed to allow staff to adequately prepare for program implementation, including developing a grant and financing program, conducting outreach and education to property owners, tenants, and contractors, as well as developing a website and online tools.

### *Subject Buildings*

Staff recommends that the proposed ordinance apply to residential buildings constructed or permitted for construction before January 1, 1990, or designed based on an adopted version of the 1985 or earlier edition of the Uniform Building Code, that contain two or more stories, three or more dwelling units, and have a wood-frame target story. Based on the analysis and consultant report, the following is staff's rationale for this range of buildings.

- Ensures the health and safety of the maximum number of residents, as this range includes all the buildings that staff considers to have likely soft story deficiencies. This range represents up to 3,577 buildings or up to 24,606 units and approximately 72,000 people (based on the average household size of 2.92 people per unit).
- Captures the majority of condominium buildings that were built in the 1980s.
- Reflects the effective date of January 1990 for the City-adopted 1988 Uniform Building Code. This 1988 Uniform Building Code provided more stringent requirements for the design and construction of buildings with soft/weak story attributes. Buildings built after January 1990 do not pose the same seismic risk.
- Corresponds to the high number of three- to four-unit buildings, 64%, that meet soft story building criteria.

### *Screening Phase, Compliance Groups, and Schedule*

All buildings that may be subject to the proposed ordinance will have 18 months to complete the screening phase. The screening phase will determine if a building is a soft story and subject to the proposed ordinance.

Focusing efforts on the most vulnerable buildings will reduce casualties and property damage during an earthquake event. This keeps people safe in their homes while response and recovery efforts may be focused on areas needed most. Staff recommends a compliance schedule that consists of three groups across multiple years.

- Focus on older buildings with structural vulnerabilities that may impact the most vulnerable residents.
- Allow more time for buildings with more complex circumstances.
- Provide efficient resource allocation – soft story buildings that may impact San José vulnerable residents receive attention sooner, ensuring that critical safety improvements are made sooner.

Staff recommends that each subject building be assigned to one of three compliance groups with an associated construction deadline as shown in **Table 4** below.

**Table 4: Proposed Compliance Groups and Schedule**

<b>Group</b>	<b>Building Type</b>	<b>Construction Completion</b>
Group 1	A subject building built before January 1, 1978, and containing five or more dwelling units (up to 1,495 buildings)	Four years after ordinance effective date
Group 2	A subject building built before January 1, 1990, and containing five or more dwelling units (up to 777 additional buildings)	Five years after ordinance effective date
Group 3	A subject building built before January 1, 1990, and containing three or more dwelling units (up to 1,305 buildings)	Six years after ordinance effective date

*Enforcement and Appeal*

Owners of potential subject buildings that fail to comply with the requirements of the ordinance may be subject to enforcement through the administrative remedies process under Chapter 1.14 of Title 1 of the San José Municipal Code. The owners may appeal the compliance order for failure to comply with the requirements of the Chapter. Owners may also appeal failure to comply with the technical codes required by the building permit through the current process under Part 7 of Chapter 24.02 of the San José Municipal Code. If an owner fails to complete the screening phase within the compliance schedule, the building will be deemed a subject building required to comply with the regulation. Failure to appeal this designation will be deemed an admitted fact in subsequent appeals.



## **Policy Considerations and Proposed Implementation Program**

### *Potential of Temporary Tenant Relocation*

The proposed ordinance will solely require retrofit of the soft story condition. Therefore, in nearly all cases, the work will affect only the critical story and crawl spaces. The uses of these areas, typically parking or storage, are likely to be disrupted temporarily during construction, but not to a degree that would prevent continuous occupancy by building tenants. For most tenants, the level of disruption, potentially involving some noise and dust, is similar to that of other normal building repair maintenance projects, such as painting and re-roofing.

The screening phase could identify some buildings with the critical story that contains both an open area and occupied units or other building services. These buildings can be retrofitted without disrupting use or occupancy. In these very limited cases, an effective retrofit will require work in occupied spaces, possibly requiring the temporary relocation of tenants, either to another unit in the building or off-site. If any apartments become temporarily uninhabitable due to retrofit work, property owners are required to locate alternative temporary housing or compensate the tenants in accordance with San José Municipal Code Section 17.20.2100. The temporary relocation assistance provisions will be detailed in the Tenant Coordination Plan.

### *No Permanent Loss of Housing Units Due to Retrofit is Expected*

The nature of soft story buildings allows them to be retrofitted without permanent loss of any existing units.<sup>1</sup> In many buildings, the work mostly involves strengthening existing walls or adding wall segments along existing perimeter lines without reconfiguring any of the occupied or usable spaces. Where new wall segments would block parking access, steel retrofit elements are commonly used instead, preserving the existing look and functionality.

### *Temporary or Permanent Decrease of Housing Services*

Retrofit work is likely to temporarily disrupt the use of parking areas and possibly other spaces (laundry, storage, etc.) that provide housing services. For temporary reductions in services caused by seismic retrofit projects, Apartment Rent Ordinance (ARO) Regulations will be amended prior to the soft story seismic retrofit ordinance effective date of April 1, 2025, so that service reduction claims related to seismic retrofit work will not be allowed due to their temporary nature and public benefit.

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<sup>1</sup> In the unlikely event a tenant is permanently dislocated from their unit or for a period longer than 60 days, the owner must comply with SJMC 17.23.2110 et seq., which includes paying relocation assistance and moving expenses.

- No reduction in rent should be awarded in a tenant petition based on housing services filed pursuant to Section 17.23 of the San José Municipal Code in which all the following apply.
  - The reduction in services is caused by the mandatory seismic retrofit project.
  - The reduction in services occurs only while work is being performed to complete the mandatory project.
  - The length of time of the reduction in services is reasonable and was communicated to tenants in advance through the approved Tenant Coordination Plan.
  - The reduction in services is temporary (occurring during retrofit work).
  - The property owner is in compliance with the City's ARO.

This provision acknowledges that because of the retrofit, tenants receive the benefit of a much safer structure, which outweighs potential temporary inconveniences. It would prevent what could be hundreds of petitions from being filed for expected, reasonable, limited, and temporary conditions related to the retrofit work.

In limited cases, a reduction in housing services might be permanent if only because the retrofit elements (walls or columns) take up space that was previously available for other uses. In these cases, properties covered by the City's ARO could be subject to tenant petitions for rent decreases based on permanent reductions in housing services.

#### *Program Outreach and Education*

Staff will conduct extensive outreach and education to property owners and residents. Partnering with community-based, small business, and trade organizations, information will be provided via in-person and virtual meetings. Staff will develop a website and online platform for property owners to create an online account.

#### *Notification to Property Owners*

As with any new mandate and program for property owners, sufficient notification will be required. Upon the effective date of the proposed ordinance, property owners will receive a letter from the City stating that their property is potentially subject to the proposed ordinance. Property owners will receive information regarding the City's soft story online platform, along with information on the retrofit process.

*Screening, Design and Building Permits, and Construction and Inspection Process*

The process for the retrofit work will include three steps: 1) screening, 2) design and building permits, and 3) construction and inspection, as described below.

1. Screening: The purpose of the screening phase is to confirm information about each potential subject building and to grant exemptions where appropriate. This phase typically will not require a detailed investigation, material testing, document review, or calculation. In almost all cases, it is a simple exercise for a design professional based on an in-person visual observation.

Property owners may opt to self-certify their properties. In such cases, they will not be required to get a licensed engineer's certification. Property owners who believe that their properties are not soft stories or have already completed the seismic retrofit of their property will be required to obtain an engineer's certification.

2. Design and Building Permits: Property owners will work with their respective design consultants to develop mitigation designs for their buildings. Plans and drawings will be submitted to the Building Division of the Department of Planning, Building, and Code Enforcement for permit issuance. All normal permit issuance processes will be followed except in cases where the property owner participates in the Retrofit Financing Program, which includes FEMA grant funding. In such cases, permits will be issued after designs are reviewed pursuant to National Environmental Policy Act requirements.
3. Construction and Inspection: Property owners will engage with contractors to start the retrofitting of their properties and completion inspection. Upon approval by City inspectors, the City will issue a Certificate of Compliance.

*Tenant Coordination Plan*

The administrative guidelines for the proposed ordinance will establish the required contents for Tenant Coordination Plans, including notification details regarding the retrofits. Requirements will also include notifications in multiple languages. Staff will coordinate with the property owners to create a Tenant Coordination Plan for each of the properties identified as soft story at the end of the screening phase. These plans would facilitate communication with residents on the expected impact of retrofit work. Details would include how the property would be affected during retrofit work and how much notice residents would be given before work starts. Included in the plans would be the owners' schedule of required notifications to residents at multiple times during the retrofit process. Staff proposes the following notification schedule.

- **Soft Story Status:** Owners must notify residents within 45 days after screening completion and the property is confirmed to be a qualifying soft story building.
- **Retrofit Process:** Owners would notify residents at least 30 days prior to the start of construction. Notices would include the anticipated length of construction, active construction work hours, and areas where residents will temporarily have limited or no access.
- **Retrofit Completion:** Owners must notify residents within 30 days of notification from the City that the completed work has been approved and the property is in compliance with the Soft Story Seismic Retrofit Program.

### *Retrofit Costs, Impact on Rents, and Proposed Retrofit Financing Program*

#### Retrofit Costs

The cost of retrofitting properties could range between \$30,000-\$140,000 per building depending on the building age and nature and severity of the soft story deficiency. Pricing elements include both soft costs (pre-design screening or evaluation, design, permits, and inspection) and hard (construction) costs. Parcels or developments with multiple buildings should be able to realize substantial cost savings (relative to the estimated per-building costs) if the retrofit is designed and constructed by the same team at the same time.

#### Impact on Rents

Most of the apartments proposed to be covered by the proposed ordinance are also covered by the City's ARO.<sup>2</sup> This rent stabilization ordinance limits annual rent increases to five percent and restricts any additional amounts that owners may petition the Rent Stabilization Program to pass through capital improvement costs to tenants. Staff's design of the proposed Retrofit Financing Program would prohibit ARO building owners from using the additional three percent capital pass-through application process.

#### Proposed Retrofit Financing Program

Funding for the seismic retrofits will be based a public-private-partnership amongst FEMA, City, housing providers, and tenants. The proposed Retrofit Financing Program will be made available during the ten-year compliance period. Below are the goals of the proposed Retrofit Financing Program.

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<sup>2</sup> The City's rent stabilization ordinance (or Apartment Rent Ordinance) provides protections to tenants in buildings with three or more units completed prior to September 7, 1979. A fact sheet on the Apartment Rent Ordinance can be found here:  
<https://www.sanjoseca.gov/home/showpublisheddocument/50281/637358528771630000>.

1. Build on the work of the Housing Department to preserve units that are affordable to very low and extremely low-income tenants as memorialized in Housing Element Strategy R-13 and R-9;
2. Advance a policy that encourages collaborations with housing providers and tenants;
3. Provide financing that leverages public and private dollars to maximize investment in communities that preserve housing units; and
4. Through the lens of equitable impact, make investments that stabilize racial and ethnic minority households that would be disproportionately impacted by a destabilizing seismic event.

Over the past year, a comprehensive analysis of ARO units was completed to understand the projected number of buildings and units that would be impacted by the proposed ordinance. The data analysis showed approximately 1,800 buildings comprising a range of three to 73 units per building totaling over 15,000 individual units would be most impacted by the ordinance. During the same period, a regression analysis was completed on tenant rents for those renters who maintained occupancy for five or more years in the same unit for the period of 2018 to 2023. The data analysis showed that during the five-year period, 55% of housing providers raised tenant rents. Those tenant rent raises averaged 2.4% year-over-year totaling approximately \$44 per year. Only 3% of housing providers raised rents above the cap requiring an administrative correction. Additionally, the data analysis confirms that the majority of the tenants in the units described above are racial and ethnic minorities.

The data analysis provided the context for designing a financing program to complete the required retrofits by incorporating rebates offered by FEMA and leveraging City funds to offer participating housing providers a low-cost retrofit financing while mitigating tenant rent increases. The proposed Retrofit Financing Program will target buildings with three to twenty units, which comprise 75% of the buildings requiring retrofits. Alongside the rebates funded by FEMA, City funds will function as a rebate and will be sourced from Measure E revenues, subject to future City Council approval, as the proposed Retrofit Financing Program will preserve units providing housing to very low and extremely low-income households. Housing providers participating in the proposed Retrofit Financing Program will be eligible to access a loan estimated to average \$100,000 in total value at a fixed interest rate of 4% or below for a loan term of 15 years. Up to 50% of the per month loan payment can be assessed to the tenant rent through the annual maximum rent increase percentage allowed under the ARO. Each participant in the proposed Retrofit Financing Program will automatically qualify for a rebate, funded by FEMA and City funds for 50% of the total cost of the retrofit. Housing providers will be permitted to apply excess loan funds under the \$100,000 cap towards other building or unit repairs upon the completion of the retrofits.

Housing providers who are eligible and choose not to enroll in the proposed Retrofit Financing Program will be prohibited from assessing a capital pass-through above the 5% annual cap on rent increase. The proposed Retrofit Financing Program is

intentionally designed to provide low-cost capital to housing providers and tenants at a low, evenly split, monthly loan payment at an interest rate far below current indicative rates. Buildings with more than twenty units will be provided access to the Retrofit Financing Program if additional funding sources are secured.

The Housing Department will partner with community development financial institutions in San José. The U.S. Department of Treasury created community development financial institutions to expand economic opportunity in low-income communities by providing access to financial products and services for local residents and businesses. By partnering with community development financial institutions to establish the proposed Retrofit Financing Program, there is an alignment of values to serve the small business owners who provide the overwhelming majority of housing units under the ARO program and low-income tenants.

In addition, during the screening period, the Housing Department will partner with the Department of Planning, Building, and Code Enforcement, Department of Public Works, Office of Economic Development and Cultural Affairs, and community partners to identify a comprehensive list of small general contractors. As a subindustry of construction trades, small general contractors have significant rates of minority-owned businesses. These small general contractors will be contacted and connected to the proposed Retrofit Financing Program so that housing providers participating in the proposed Retrofit Financing Program will have a list of available contractors to complete the retrofits within six months of receiving approval for a loan. This additional component of connecting contractors to housing providers will help to ensure equitable access to economic opportunities for small and minority-owned general contractors to receive the benefits of the City investment.

Additionally, opportunity exists to build capacity of existing small general contractors, as well as connect individuals to training and entrepreneurial programs. Staff will explore opportunities to partner with local building and trades organizations and small business development organizations.

## **Policy Alternatives**

Table 5 provides the four subject building options that staff considered for the proposed ordinance. Staff recommends Option #4 as indicated in the *staff recommendation* section of this memorandum. Should either of the other three options be decided upon by the City Council, more residents would be at risk and harmed during an earthquake event, more buildings would be damaged, reducing the stability of the housing stock, and more costs would be incurred during recovery.

**Table 5: Subject Buildings Options for Proposed Ordinance**

Option #	Building Age/Size	Buildings/Residents
1	Pre-1978, five or more units	Up to 1,495 buildings, 13,565 units ~ 40,000 people (Avg. household: 2.92 per unit)
2	Pre-1990, five or more units	Up to 2,272 buildings*, 19,084 units ~ 56,000 people
3	Pre-1978, three or more units	Up to 2,363 buildings, 16,763 units ~ 49,000 people
4	Pre-1990, three or more units	Up to 3,577 buildings*, 24,606 units ~ 72,000 people

\*Buildings are cumulative for a range of years

### Racial Equity Impact Analysis

The people most impacted by the proposed ordinance are the renters living in the soft story buildings and the owners of these buildings. Most soft story buildings subject to the proposed ordinance are rent-stabilized buildings covered by the City’s ARO.

According to the most recent analysis,<sup>3</sup> ARO renters are primarily people of color, with Latinx households comprising the largest share (47%), Asian American Pacific Islander households (26%), and African American households (5%). Fifty-two percent of ARO households are housing cost-burdened<sup>4</sup> and are more likely to live in overcrowded conditions. Forty-three percent of ARO renters are immigrants, and many speak English “Not Well” or “Not at All” (27%).

Properties subject to the ARO are often owned by individuals who own only a few units and rely on rental income for their livelihoods and/or retirement savings. These owners are often referred to small “mom and pop” housing providers. Unlike properties owned by large corporate entities, small “mom and pop” property owners often have limited capital improvement reserves and/or slim profit margins. While staff does not have access to racial demographic data for property owners, including small “mom and pop” owners, staff has engaged with many owners who are persons of color.

Given the demographics of renters and property owners, it is important to assess the racial equity implications of the proposed ordinance and implementation plan.

<sup>3</sup> Outcomes from Rent Stabilization in San José (2019); Economic Roundtable; Burns, Patrick; Flaming; Daniel: [637257392314200000 \(sanjoseca.gov\)](https://www.sanjoseca.gov/637257392314200000)

<sup>4</sup> Cost burden is defined by the federal government as paying more than 30% of household income for rent plus a reasonable utility allowance.

### *Equity Considerations in Proposed Ordinance and Implementation Plan*

- **Prevent Loss of Life and Displacement:** The proposed ordinance would help prevent loss of life and displacement in a major earthquake by defending against building collapse. Building collapse would also lead to mass sheltering of displaced individuals in community centers, libraries, and other public facilities. Implementing the proposed ordinance would enhance the safety of up to 72,000 people during a major earthquake. It is important to note that the affected group of renters would also have fewer personal resources for post-disaster recovery, and certain types of post-disaster assistance can be limited.
- **Preserve Existing Housing Stock:** Soft story retrofits would prevent the loss of homes after an earthquake. The number of soft story buildings in San José is estimated to be approximately 3,500, containing nearly 25,000 units, or five to seven percent of the total housing stock. Many of these buildings include rent-stabilized apartments, many of which have deeply affordable or below-market rents.
- **Prevent Illegal Evictions through Tenant Coordination Plans and Tenant Notifications:** While retrofit construction is not expected to require tenant relocation, there is a concern for the potential of certain property owners to use seismic retrofit construction as a means to illegally evict tenants, in order to raise rents through vacancy decontrol.
- **Create economic opportunities for small and racial and ethnic minority owned businesses.**

This risk, combined with a potential associated rent increase, could be a burden from the proposed ordinance to the renters living in subject soft story buildings. To address this concern, Housing staff will implement a proactive, comprehensive education and outreach program. The outreach staff will provide detailed information about the proposed program, the retrofit process, the process and when owners may apply for a pass-through cost, tenant coordination plans and notifications, and inform renters of their rights.

Additionally, renters will be made aware if they suspect wrongful eviction, they can seek assistance from the City's Rent Stabilization Program and, in certain instances, the FEMA External Civil Rights Division. An essential equity component of this approach will be to ensure language accessibility for limited-English proficient residents. It will be useful for staff to start to track if there is an increase in the number of eviction notices submitted to the Housing Department throughout the proposed implementation program.

### *Equity Considerations in the Proposed Retrofit Financing Program*

It is important to support small "mom and pop" housing providers in offsetting the costs of retrofit projects. Funding for the seismic retrofits will be based on a public-private-partnership between FEMA, City, housing providers, and tenants. The proposed Retrofit



Financing Program is intentionally designed to provide low-cost capital to housing providers and tenants at a low, evenly split, monthly loan payment at an interest rate far below current indicative rates.

## **EVALUATION AND FOLLOW-UP**

Should City Council approve the proposed ordinance, staff will provide a status report on the program implementation to the Community and Economic Development Committee in Q3 2025. Further, staff anticipates returning to the City Council in Q2 2025 for approval of the proposed Retrofit Financing Program, including minor policy changes regarding the use of Measure E funding for affordable housing preservation, agreements with FEMA to access grant funding, and any relevant agreements with community development financial institutions. Thereafter, staff anticipates providing annual status reports to the Community and Economic Development Committee.

## **COST SUMMARY/IMPLICATIONS**

As described above, the Administration is developing a Retrofit Financing Program to preserve important affordable housing stock whose occupants, often racial and ethnic minority households, would be disproportionately impacted by a seismic event.

Subject to future City Council approval, the Retrofit Financing Program is a public-private partnership among FEMA (grant), the City (Measure E funds), building owners, and tenants. The costs will be borne by all groups over 15 years. The use of Measure E funding is in alignment with the preservation of affordable units, under Housing Element Strategy R-13 and R-9. However, as City Council Policy 1-18, Section 22 currently only allows the affordable housing portion of funding to be used for the “creation of new affordable housing,” the policy will need to be amended in the future to allow for funds to also be used for the preservation of existing affordable housing. The initial programmatic assumptions, subject to change, are summarized below.

- Total number of eligible buildings: 1,800 (average of eight units per building)
- Average cost per building retrofit: \$100,000
- Total program cost: \$180,000,000 expended over a 10-year period
  - 50% Rebate Funding: \$90,000,000
    - Measure E Funding: \$61,000,000 (subject to future approval)
    - FEMA Funding: \$29,000,000 (subject to future approval)
  - 50% Building Owners: \$90,000,000
    - Owners will be eligible to access a loan through a community development financial institution averaging \$100,000 in total value at a fixed interest rate of 4% for an initial term of 15 years

- The 50% rebate value is applied to the loan, which reduces the term to seven years and eliminates over \$20,000 in estimated interest costs
- Average annual payment of \$8,880

## **COORDINATION**

This memorandum has been coordinated with the City Attorney's Office and the City Manager's Budget Office.

## **PUBLIC OUTREACH**

Staff engaged the community from May 2023 through August 2024 in developing the proposed ordinance and implementation program. Below are the stakeholders.

- Residents
  - Staff trained 12 promotores on the proposed ordinance who conducted neighborhood outreach. These 12 individuals are part of the City's pilot Promotores Program administered through contracts with non-profit organizations;
- Individual property owners;
- Housing Providers Roundtable;
- California Apartment Association;
- Bay Area Housing Network;
- Santa Clara and San Benito Counties Building and Trades Council
- SV@Home;
- Amigos de Guadalupe Center for Justice and Empowerment;
- SOMOS Mayfair;
- Latinos United for a New America;
- Sacred Heart Community Service;
- Law Foundation of Silicon Valley;
- Silicon Valley Council of Nonprofits;
- Working Partnerships USA; and
- San José Chamber of Commerce.

The following is a summary of stakeholder feedback.

- City should prioritize health and safety concerns.
- Tenants are very concerned about increased rents due to pass-throughs and increased risk of displacement.
- Tenants want to understand the process for retrofit work.

- Housing providers want a reasonable timeframe for compliance and streamlined City processes.
- Housing providers are concerned about retrofits' cost and ability to be financed.
- Housing providers are concerned about the increasing state and local mandates and regulations that drive costs up, such as balcony upgrades (Senate Bill 721) and building electrification.
- Concern from housing providers that other building requirements will be triggered due to retrofit work. The City should clearly communicate that this is not the case.
- Housing providers are interested in connections/referrals to qualified contractors and engineers.
- Staff should conduct more outreach and engagement with housing providers and tenants.
- City should seek more funding for rebate programs to subsidize more buildings.

### **COMMISSION RECOMMENDATION AND INPUT**

At the May 11, 2023, Housing and Community Development Commission meeting, staff provided an informational briefing on the approach to the proposed ordinance and implementation. Commissioners shared the importance of completing retrofits to keep residents safe during an earthquake and to maintain the affordable housing stock in the City.

At the November 9, 2023, Housing and Community Development Commission meeting, Commissioners considered a report<sup>5</sup> on the findings and recommendations from its Ad Hoc Committee on seismic retrofit. Commissioners discussed the effect of soil liquefaction on soft story buildings during an earthquake. The report *titled "HCDC Ad Hoc Seismic Retrofit Committee Preserve Affordable Housing Short Term and Long-Term Overview & Policy Framework Recommendation, November 1, 2023"* can be found at

<https://www.sanjoseca.gov/home/showpublisheddocument/106748/638345374658330000>.

At the February 8, 2024, Housing and Community Development Commission meeting, staff presented the policy framework for the proposed ordinance and implementation. Commissioners shared concerns about potential rent increases and the importance of providing rebates to property owners and seeking other financial resources. They also stressed the importance of education to residents and property owners.

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<sup>5</sup> Commission meeting packet and written public comment, Nov. 9, 2023, at <https://www.sanjoseca.gov/your-government/departments-offices/housing/housing-community-development-commission/agendas-synopses>.

**CEQA**

Not a Project, File No. PP17-008, General Procedure and Policy Making resulting in no changes to the physical environment; Statutorily Exempt, File No. ER23-173, CEQA Guidelines Section 15301, Existing Facilities.

**PUBLIC SUBSIDY REPORTING**

This item does not include a public subsidy as defined in section 53083 or 53083.1 of the California Government Code or the City's Open Government Resolution.

/s/  
CHRIS BURTON  
Director,  
Planning, Building and  
Code Enforcement

/s/  
ERIK L. SOLIVÁN  
Director,  
Housing

/s/  
RAYMOND RIORDAN  
Director,  
City Manager's Office of  
Emergency Management

The principal authors of this memorandum are Abraham Chacko, Project Manager, and Lisa Joiner, Deputy Director, Department of Planning, Building and Code Enforcement; Erik Soliván, Housing Director, Housing Department. For questions, please contact Abraham Chacko at [Abraham.chacko@sanjoseca.gov](mailto:Abraham.chacko@sanjoseca.gov) or Lisa Joiner at [lisa.joiner@sanjoseca.gov](mailto:lisa.joiner@sanjoseca.gov)

**ATTACHMENT**

Attachment – Background Studies and Policy Recommendations Executive Summary

## **Attachment**

### **BACKGROUND STUDIES AND POLICY RECOMMENDATIONS**

#### **CONSULTANT: DAVID BONOWITZ, SE**

#### **EXECUTIVE SUMMARY**

The City of San José has been actively developing a “soft story,” or WFTS,<sup>1</sup> seismic mitigation program since 2018, continuing earlier work that started soon after the 1989 Loma Prieta earthquake. Currently, the City envisions an overall program with two coordinated parts – a citywide part expected to address at least a thousand collapse-prone buildings, and a FEMA-funded part that will partially subsidize or rebate some owners’ retrofit costs. In 2022, the City contracted with a team led by David Bonowitz, S.E. to help develop both programs.

The purpose of this report is to present, in a comprehensive and narrative format, the information compiled by our team under contract to the City. The purpose of that information is to inform the policy-making process by summarizing and contextualizing data expected to be of interest to City staff, the City Council, and the public.

#### 1. Wood-frame target story (WFTS) inventory

Chapter 1 summarizes and contextualizes the City’s inventory of WFTS buildings. Inventory comes first so that policy decisions can be informed by city-specific data.

- San José’s permanent housing stock comprises about 206,000 buildings containing about 351,000 units. Of those, about 17,000 buildings and 156,000 units are in multi-unit (three or more) apartment and condominium buildings. (Section 1.2.1)
- Buildings constructed before about 1990 with wood-frame target stories (WFTS), sometimes called “soft story” buildings, pose a widely recognized seismic risk to tenants, owners, and the City. San José has between 2,600 and 3,600 such buildings, containing between 18,000 and 25,000 units – 5 to 7 percent of its total housing stock. (Section 1.2.1)
  - The WFTS portion of the housing stock is significantly larger than the portion made up by buildings with other common seismic deficiencies for which mitigation programs have already been implemented, including cripple wall houses, room-over-garage houses, unreinforced masonry buildings, and mobile homes. (Section 1.3.1)
  - In some neighborhoods, the pre-1990 WFTS buildings comprise up to 20 percent or more of the local housing stock, comparable with other Bay Area cities that have already adopted mandatory WFTS retrofit programs. (Sections 1.2.3 and 1.3.2)
- As a group, the pre-1990 WFTS buildings have the following characteristics, among others, relevant to the development of a citywide mitigation program:

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<sup>1</sup> See the Terminology section of this report for explanations of key terms, including “soft story,” “target story,” and “wood-frame target story” or WFTS. While the public and many City documents refer to “soft story” buildings and programs, this report generally uses the acronym WFTS for technical reasons explained there.

- A substantial majority of the buildings are only two stories tall. This distinguishes San José’s WFTS cohort from the taller (and older) WFTS buildings in denser neighborhoods in San Francisco. (Section 1.2.2)
  - Essentially none have commercial spaces in the collapse-prone first story. This also distinguishes San José’s buildings from San Francisco’s. (Section 1.2.2)
  - About half have at least one occupiable residential unit in the collapse-prone first story. As this affects both the risk and the likelihood of tenant disruption during retrofit, it might also influence decisions about how to schedule and implement a retrofit program. (Section 1.2.2)
  - The pre-1990 WFTS buildings include only a small number of hotels and motels, care facilities, and deed-restricted affordable housing. Nevertheless, these specialty housing types should be included in a citywide mitigation program and should perhaps be prioritized for FEMA-funded retrofit rebates if their uses are deemed important to the City’s emergency planning and post-earthquake recovery. (Section 1.4)
- For purposes of mitigation planning, the pre-1990 WFTS buildings can be broken into subsets based on age, size (number of units), and ownership (rental or condominium), then combined to select an appropriate program scope. Four potential program scopes are described in the following table.

**Table 1.2.5-1 Four Possible WFTS programs**

<b>Subject buildings</b>	<b>Apartment</b>	<b>Condominium</b>	<b>Total</b>
<b>1. Pre-1978, 5+ units</b>	949 – 1,273 buildings 9,424 – 12,063 units	103 – 222 700 – 1,502	1,052 – 1,495 10,124 – 13,565
<b>2. Pre-1990, 5+ units</b>	1,118 – 1,441 10,716 – 13,355	523 – 831 3,382 – 5,729	1,641 – 2,272 14,098 – 19,084
<b>3. Pre-1978, 3+ units</b>	1,487 – 2,008 11,467 – 14,773	160 – 355 929 – 1,990	1,647 – 2,363 12,396 – 16,763
<b>4. Pre-1990, 3+ units</b>	1,665 – 2,185 12,792 – 16,098	901 – 1,392 5,391 – 8,508	2,566 – 3,577 18,183 – 24, 606

## 2. Review of existing San José seismic risk reduction policy

Chapter 2 reviews the City’s existing policies related to housing and earthquake risk reduction. This provides a context for assessing the WFTS inventory and potential mitigation options. (Existing policies and regulations specific to seismic retrofit are covered in Chapter 4.)

- San José’s planned mandatory retrofit program for WFTS buildings aligns with its broader hazard mitigation goals and with specific policy decisions made over the last two decades. (Sections 2.1 and 2.2)
- The City has already taken steps to develop, prioritize, fund, and implement a WFTS mitigation program, even if some of those steps are not explicitly recorded in the Local Hazard Mitigation Plan or related plans. (Section 2.2)

- Because the development and preservation of housing is so important to San José, details of the planned WFTS program will need to be coordinated with existing City policies for rent stabilization and tenant protection, as discussed in Sections 4.1.2, 4.2, and 5.2.4. (Section 2.3)

### 3. Engineering studies and precedents

Chapter 3 proposes a retrofit scope and engineering criteria to fit the inventory findings (Chapter 1) to the policy goals (Chapter 2).

- Post-earthquake reoccupancy and recovery are linked to San José's prioritization of affordable housing, as discussed in Chapter 2. Together with the inventory data, summarized in Chapter 1, this linkage merits a mandatory retrofit program for multi-unit buildings with suspected WFTS conditions. (Section 3.1.1)
- *California Existing Building Code* Appendix Chapter A4, which focuses the retrofit on collapse-prone structural conditions in the critical story, and which offers ample precedent in Bay Area WFTS programs, is suitable as retrofit design criteria for a mandatory program in San José. It can be expected to achieve the City's program objectives. (Section 3.1.2)
  - FEMA P-807, though it will need to be customized and supported with a technical bulletin, should also be allowed as criteria, especially for purposes of compliance by evaluation (Section 3.1.2). We used FEMA P-807 to study two small but common San José building types and to support a recommendation that they be exempt from mandatory retrofit (Section 3.2.1).
- A study of the four retrofit program scopes tabulated above, using a proxy portfolio and four earthquake scenarios, found that any of the four scopes will have a program-wide benefit-cost ratio (BCR) substantially higher than 1.0. The highest BCRs involve a scope that includes smaller buildings (3 or 4 units) but exempts newer buildings (built in 1978 or later). Including the many smaller buildings is especially important for reducing casualties and short-term housing loss. (Section 3.3)

### 4. Cost sharing

Chapter 4 assesses the City's existing regulations for retrofit cost sharing between owners and tenants. In particular, it presents a first-of-its-kind analysis of expected rent increases based on the City's Apartment Rent Ordinance (ARO), combining our inventory findings (Chapter 1) with the data from the City's rent registry. Chapter 4 also reviews the various state and federal assistance programs in light of our inventory findings.

- While a number of programs and regulations provide ways to share the cost of retrofit between owners, tenants, the City, and other potential funders, the most important ones for the City's planned program involve the FEMA grant the City has already secured and the existing regulations for pass through of Specified Capital Improvement costs in the City's Apartment Rent Ordinance. (Section 4.1)
- In theory, the ARO capital improvement pass-through regulations could result in raised rents on tenants in rent-stabilized units, which represent about 60 percent of the units in

the largest likely citywide program, but only about one third of the rent-stabilized units in the City. (Section 4.3.1)

- Analysis of current rents, using data from the City’s rent registry, indicates conservatively that if all of the owners’ costs are eligible for pass through, and ignoring the available FEMA funds, the median rent increase in these units will be less than 2%, but about 15 percent of the units could see increases that invoke the ARO’s 3% cap. (Section 4.3.3)
- To minimize displacement from a planned mandatory program, the City should consider tailoring the current ARO provisions and regulations as follows (Sections 4.2 and 4.3.5):
  - For ARO-regulated buildings, allow pass through for only a portion of the retrofit cost.
  - Implement a streamlined petition and approval process for WFTS retrofits.
  - Prioritize displacement-prone buildings, units, and tenants for FEMA rebates.
  - Amend the ARO pass through regulations to clarify its application to WFTS retrofits.
  - Extend the ARO pass through regulations to non-ARO buildings.
  - Enhance and provide more outreach regarding the City’s existing eviction assistance programs.
  - Monitor the program, collect data, and prepare to adjust regulations for the program’s later stages.

## 5. Policy recommendations

Chapter 5 restates and expands on our policy recommendations from Chapters 2 through 4.

- San José should enact and implement a citywide mandatory WFTS retrofit program requiring compliance, by evaluation or retrofit, with criteria substantially similar to *California Existing Building Code* Appendix Chapter A4. Work above the highest wood-frame target story should not be required. Other structural improvements, nonstructural component protection, and mitigation of geologic site hazards should not be required. (Section 5.2.1)
- Any building built before 1990 that contains three or more housing units and has a wood-frame target story should be subject to the mandatory retrofit program. Certain 2-story, 4-unit buildings should be exempted based on work described in Section 3.2.1 of this report. As shown in Section 1.2.5, this program scope is expected to include 2,600 to 3,600 buildings containing 18,000 to 25,000 units. (Section 5.2.2)
- Assuming the recommended mandatory program, and assuming adequate PBCE capacity, we recommend spreading the program over seven years, starting with a one-year screening phase. The subject buildings would then comply in defined groups, with staggered deadlines. Grouping the buildings makes the program feasible for the City and recognizes that some buildings will need more time to comply, especially due to occupiable units in the critical ground floor. We recommend four compliance groups, with condominium buildings having the early deadlines (larger buildings first) and rental apartment buildings having later deadlines (again, larger buildings first). (Section 5.2.3)



- The City should adjust certain existing tenant protection and rent stabilization policies as they would apply to mandatory WFTS retrofits. In particular, certain allowances for pass through costs in the current Apartment Rent Ordinance should be adjusted or clarified to ensure fair cost-sharing by owners and tenants. The normal petition process should also be streamlined to approve typical WFTS retrofit projects without lengthy review. (Section 5.2.4)
- The FEMA rebates should be used to help low-resourced owners and tenants comply with the mandatory citywide program without excessive rent increases. Priority should be given to buildings that provide affordable housing to tenants qualified as low income, and the rebate amount should be set to essentially eliminate any rent increase for these qualified tenants. (Section 5.3)
- While the City and program stakeholders determine the retrofit program scope and schedule, the City should begin working on program implementation, identifying staffing needs and building the tools and procedures it will need for a successful, effective program. (Section 5.4)

## Terminology

The following abbreviations, acronyms, and definitions are used in this report. Certain terms might have other definitions when used in other places.

### Abbreviations and acronyms

<b>ARO</b>	Apartment Rent Ordinance (SJMC Section 17.23, Parts 1 through 9)																
<b>ASCE 41</b>	<i>Seismic Evaluation and Retrofit of Existing Buildings</i> (ASCE/SEI 41-17). The next edition is expected to be approved for publication in late 2023.																
<b>Cal OES</b>	California Governor’s Office of Emergency Services																
<b>CEBC</b>	<i>California Existing Building Code</i>																
<b>Chapter A4</b>	Appendix Chapter A4 of the 2022 (or latest) edition of the CEBC, titled “Earthquake Risk Reduction in Wood-Frame Residential Buildings with Soft, Weak or Open Front Walls”																
<b>CRMP</b>	California Residential Mitigation Program																
<b>DRAH</b>	Deed-restricted affordable housing																
<b>EOP</b>	Emergency Operations Plan (San José, 2019)																
<b>FEMA</b>	Federal Emergency Management Agency																
<b>FEMA P-807</b>	<i>Seismic Evaluation and Retrofit of Multi-Unit Wood-Frame Buildings with Weak First Stories</i> (FEMA P-807, May 2012)																
<b>HMGP</b>	Hazard Mitigation Grant Program																
<b>HOA</b>	Homeowners’ association (applies typically to a condominium development)																
<b>HSC</b>	<i>California Health and Safety Code</i>																
<b>LHMP</b>	Local Hazard Mitigation Plan																
<b>NOAH</b>	Naturally occurring affordable housing																
<b>PBCE</b>	San José Department of Planning, Building & Code Enforcement																
<b>P-807</b>	See FEMA P-807																
<b>SCI</b>	Specified Capital Improvement (as used in the ARO)																
<b>SFHA</b>	Special Flood Hazard Area																
<b>SJMC</b>	<i>San José Municipal Code</i>																
<b>TPO</b>	Tenant Protection Ordinance (SJMC Section 17.23, Part 12)																
<b>WFTS</b>	Wood-frame target story																
<b>WFTS types</b> (see also Figure 1.1.3- 1)	<table><tr><td>2SO</td><td>Two sides open</td><td>LSO</td><td>Long side open</td></tr><tr><td>3SO</td><td>Three sides open</td><td>OS</td><td>Open story</td></tr><tr><td>CW</td><td>Cripple wall</td><td>SSO</td><td>Short side open</td></tr><tr><td>EBP</td><td>End bay parking</td><td>ROG</td><td>Room over garage</td></tr></table>	2SO	Two sides open	LSO	Long side open	3SO	Three sides open	OS	Open story	CW	Cripple wall	SSO	Short side open	EBP	End bay parking	ROG	Room over garage
2SO	Two sides open	LSO	Long side open														
3SO	Three sides open	OS	Open story														
CW	Cripple wall	SSO	Short side open														
EBP	End bay parking	ROG	Room over garage														

## Definitions

The following explanations are not formal, legal, or consensus definitions. Rather, they are plain language descriptions of how these terms are generally used within this report, and they are intended only to simplify and clarify the report for readers. Where the same term is used in a reference, the definition from that reference applies.

**Affordable housing** Using Federal government guidelines, housing where the monthly cost (rent or mortgage, plus utilities) is not more than 30 percent of the tenants' monthly pre-tax income. Where the specific tenant is not known, housing planners and developers sometimes define the term based on area median income.

Housing experts distinguish two types of affordable housing: Naturally occurring affordable housing (NOAH) and deed-restricted affordable housing (DRAH). DRAH is more closely regulated and is tracked by the City and/or County.

In San José, some DRAH housing regulations reference this definition from SJMC Section 17.23.110: “ ‘Affordable Rental Unit’ means each Rental Unit that is owned or operated by any government agency, or any individual Rental Unit for which the Rent is limited to no more than affordable rent, as such term is defined in California Health & Safety Code Section 50053, for lower income households pursuant to legally binding restrictions recorded for the benefit of a government agency. ...”

**Apartment** Rental housing in a multi-unit building, tracked by the Santa Clara County Assessor as Use Code 03 (“Three and Four Family”) or 04 (with subcategories).

**Condominium** (or condo) A unit, or a multi-unit building comprising such units, generally assumed to be owner-occupied, tracked by the Santa Clara County Assessor as Use Code 06. Owners of individual units in a condominium building often act through their HOA.

**Deed-restricted affordable housing** See *affordable housing*

**Incentive** Incentives are ways in which a city (or other institution, such as a lender or insurer) can share the cost of work that would otherwise be voluntary. Incentives are normally implemented through a defined program with eligibility, prioritization, and compliance rules, much like a mandatory program. Positive incentives can be administrative – such as technical assistance, project expediting, or policy exemptions (waivers from triggered or future work) – or financial – such as fee waivers or rebates, insurance premium discounts, or subsidies or rebates of actual design and construction costs. Positive incentives applied to mandatory programs are no longer incentives (since the work is already required) but can be thought of as “sweeteners” or facilitators, as in Table 3.4.1-1. Negative incentives can include disqualification from related programs or from post-earthquake assistance for owners or buildings that do *not* retrofit.

<b>Multi-unit</b>	Having three or more units. This is based on the <i>California Building Code</i> and <i>California Residential Code</i> definitions of <i>dwelling</i> as a 1- or 2-unit building (often cited as “1- or 2-family”)
<b>Naturally occurring affordable housing</b>	See <i>affordable housing</i>
<b>Open front</b>	A common description of a WFTS condition characterized by a perimeter wall line generally lacking in-plane seismic force-resisting elements. The term is qualitatively defined in ASCE 41 but is not used in the Tier 1 checklists. The term <i>open-front wall line</i> is defined in Chapter A4, but essentially all Bay Area WFTS programs use the broader (and equally judgment-reliant) term WFTS.
<b>Pass through</b>	The portion of an owner’s project cost transferred to rental tenants in the form of a rent increase. In ARO-regulated buildings, pass through amounts are limited. See Section 4.2.
<b>Rebate</b>	The portion of an owner’s retrofit project cost reimbursed through the City’s FEMA-funded hazard mitigation grant. Some jurisdictions refer to these reimbursements as grants or subsidies; the City has chosen to call them rebates in the context of its WFTS mitigation program.
<b>Rent registry</b>	The City’s listing of rents for ARO-regulated apartments, described at <a href="https://www.sanjoseca.gov/your-government/departments-offices/housing/landlords-property-managers/rent-registry">https://www.sanjoseca.gov/your-government/departments-offices/housing/landlords-property-managers/rent-registry</a>
<b>Soft story</b>	<p>A structural condition variously defined as an irregularity for purposes of new building design (by ASCE 7), as a seismic deficiency for existing building evaluation (by ASCE 41), and as a type of wall line subject to retrofit (by Chapter A4). As an engineering term, a “soft story” condition can exist in buildings of any structural system or material, use or occupancy, or age.</p> <p>The term is also used in the vernacular and in policy (including retrofit ordinances and regulations) by policy makers, mitigation planners, the media, and the public to mean the set of buildings defined for purposes of a specific mitigation program. In this context, a “soft story building” usually means a residential wood-frame building of a specified size (stories or number of units) and age, with a recognizable collapse-prone lower story deficiency, such as a defined “soft story,” “soft wall line,” or WFTS.</p> <p>To avoid misunderstandings caused by the non-engineering use of this engineering term, and to avoid problems cause by its various engineering definitions, essentially all Bay Area mitigation programs (as well as this report) use the term WFTS and WFTS building instead.</p>

<b>Target story</b>	<p>As defined in multiple Bay Area WFTS program provisions and regulations, and as proposed for San José: Either (1) a basement story or underfloor area that extends above grade at any point or (2) any story above grade, where the wall configuration of such basement, underfloor area, or story is substantially more vulnerable to earthquake damage than the wall configuration of the story above; except that a story is not a target story if it is the topmost story or if the difference in vulnerability is primarily due to the story above being a penthouse or an attic with a pitched roof.</p> <p>Identification of a <i>target story</i> requires engineering judgment.</p>
<b>Townhouse</b>	<p>A style of multi-unit residential building common among San José’s condominium buildings, in which units are arrayed side by side, not stacked. Like the <i>California Residential Code</i>, which defines the term as a building with three or more <i>townhouse units</i>, this report uses the term to mean a particular configuration or style of building.</p> <p>See Section 3.2.2 and Figure 3.2.2-1.</p>
<b>Weak story</b>	<p>See <i>soft story</i>. The same definition and explanation apply, with <i>weak</i> substituted for <i>soft</i>.</p>
<b>WFTS building</b>	<p>A building with a suspected WFTS condition. At the inventory stage and throughout this report (and until confirmed by an appropriate evaluation or screening process), any WFTS building should be understood to have a <i>suspected</i> WFTS condition because the identification of the WFTS condition has not involved a site visit, drawing review, material testing, or calculation, some, or all of which are normally necessary for a confirmed assessment.</p> <p>A WFTS building can have any use, size, or age, but in the context of this report, the term may be understood to mean a multi-unit residential building, typically built before 1990. In many cases, the phrase “pre-1990 WFTS” is used for clarity, but in some cases the age is not stated but should be understood from context as referring to the buildings that are subject to the City’s planned mitigation program.</p> <p>As a non-engineering term, “WFTS building” is preferable to “soft story building” because it avoids conflation with the engineering definitions of “soft story.” Thus, <i>WFTS building</i> can be used to reference a building subject to a certain program, code provision or regulation – that is, also meeting the criteria for use, size, and age.</p>
<b>WFTS unit</b>	<p>A residential unit in a WFTS building. All of the units in a WFTS building are WFTS units, regardless of where in the building they are located. Since a WFTS is a condition that applies only to whole buildings, “WFTS unit” can be easily misunderstood, so the term should be used and understood only as a convenient shorthand.</p>

**Wood-frame target story** As defined in multiple Bay Area WFTS program provisions and regulations, and as proposed for San José: A target story in which a significant portion of lateral or torsional story strength or story stiffness is provided by wood-frame walls.

Identification of a *target story* requires engineering judgment.

See the list of WFTS types at “WFTS types” in the table of abbreviations above and Figure 1.1.3-1 for examples.