



MEMORANDUM

TO: PUBLIC SAFETY COMMITTEE

FROM: DAVID M. REYES, DIRECTOR OF PLANNING & COMMUNITY DEVELOPMENT DEPARTMENT

DATE: FEBRUARY 4, 2019

SUBJECT: SEISMIC RETROFITTING OF SOFT-STORY BUILDINGS PROGRESS REPORT

BACKGROUND:

On December 4, 2017 and May 16, 2018 staff and consultant, Degenkolb Engineers, presented to the Public Safety Committee on the topic of multiple-family wood-framed buildings with a soft-story deficiency within the City of Pasadena. These wood soft-story buildings were primarily constructed between the 1920s and 1970s. Wood soft-story buildings are wood-framed buildings with more than one story that typically have extensive ground story windows, garage doors, or open-air spaces (such as tuck under parking) with little or no enclosing solid wall. These buildings result in a relatively soft or weak lateral load resisting system in the lower story making them more vulnerable to collapse during an earthquake. The poor performance of these buildings was evident during the 1989 Loma Prieta and 1994 Northridge earthquakes, accounting for significant human loss and property damage. Currently, the City estimates that there are approximately 472 wood soft-story buildings that were constructed in Pasadena before the 1978 California Building Codes became effective. The 1978 California Building Codes are typically used as a trigger since this code improved the design of these types of buildings. To reduce community seismic risk in the City, as discussed previously with the Public Safety Committee, staff is moving forward with the development of the ordinance requiring the upgrade of existing soft-story buildings.

PROJECT UPDATE:

Staff has taken multiple steps in creating the proposed seismic risk reduction program for buildings following the May 16, 2018 presentation to the Public Safety Committee. With the assistance of Degenkolb Engineers, the following tasks have been completed to date:

- (1) Advisory Group – In July 2018, staff assembled an Advisory Group composed of stakeholder members including City technical staff from various departments, local structural engineers and architects, a seismologist/Caltech professor, a local developer, a financial institutional representative, a local real estate professional, and representatives from local housing associations. Staff, Degenkolb, and the Advisory Group met on July 17,

- 2018 and a second meeting was held on September 10, 2018 to discuss the group's recommendations for the applicability, timeframes, and prioritization of the draft regulations.
- (2) Technical Committee – Staff and Degenkolb met on November 1, 2018 with an experienced group of engineers from the Structural Engineers Association of Southern California (SEAOSC) to review the technical portions of the draft regulations and provide comments to staff. The technical language consists of the guidelines establishing engineering design methods that the City will allow, such as a list of acceptable materials and allowable engineering values. The guidelines are similar to those used by adjacent cities that are conducting similar seismic risk reduction programs. The Technical Committee provided comments that were focused on improving the language based on recent experience when implementing similar regulations.
 - (3) Grant Funding - Staff submitted a Notice of Interest (NOI) on October 5, 2018 to the California Office of Emergency Services for a Section 404 Hazard Mitigation Grant to possibly receive FEMA funding to assist owners with the required retrofit costs. The application process for this grant is two-fold; if the City's NOI submission is selected, the City will proceed with the next step of the selection process which includes a subapplication consisting of a detailed benefit-cost analysis. CalOES is expected to make a final selection of the grant recipients in Spring 2019.
 - (4) Community Outreach – Notices were sent in July 2018 to owners of the 1,765 condominium units and 440 apartment buildings within the buildings identified by the City. The notices advised property owners of the possibility of this mandatory retrofit ordinance and that their condominium/apartment building has been identified as a potentially vulnerable building which may be subject to the ordinance. Via a separate notice, these property owners were also invited to attend a community meeting held on November 8, 2018 where the draft regulations of the proposed ordinance were presented. Approximately 200 property owners attended the meeting and engaged with staff in a questions and answers session.

PROPOSED REGULATIONS:

Over the course of two study sessions, the Advisory Group was tasked with providing recommendations on the applicability, prioritization and compliance timelines for the proposed ordinance. With the assistance of City staff and Degenkolb Engineers, draft regulations were formed based upon the group's recommendations:

Applicability

The recommended ordinance would apply to all existing wood-framed or partially wood-framed multiple-family residential buildings with two or more stories which contain a ground floor or basement containing parking or other similar open-floor space that causes soft, weak, or open-front wall lines and where the structure was built under the Building Code standards enacted prior to January 1, 1978. Commercial buildings, hotels and motels are not included. Single-story multiple-family structures are also not included since they do not meet the criteria for soft-story.

Prioritization

After analyzing the unit count, age of the buildings and tenancy type of the 472 buildings identified as being soft-story, the Advisory Group ultimately recommended to categorize the

inventory of buildings into three separate tiers and to prioritize the completion of the retrofits accordingly. Priority I shall consist of buildings with 3 or more stories containing 25 or more units, buildings which qualify as historic, and buildings which have been identified as containing affordable housing units. Priority II shall consist of buildings which contain 10 to 24 units, and Priority III shall consist of all other buildings not falling within Priority I or II. Notices for compliance will be sent to all buildings within Priority I first, followed by notices to Priority II and III in six month increments.

Priority	Priority Description	Number of Buildings
Priority I	Buildings with 3 or more stories; buildings containing 25 or more units; Historic buildings, and buildings with affordable housing units	165
Priority II	Buildings containing 10 to 24 units	106
Priority III	Buildings not falling within the definition of Priority I or II	201

Timelines for Compliance

In forming their recommendation, the Advisory Group considered the timelines established by other jurisdictions which have adopted a local soft-story retrofit ordinance, including Los Angeles, Santa Monica and West Hollywood. The group found that there is no standard or average compliance period, and that each jurisdiction set its timelines based upon their capacity to review, approve and inspect their inventory of soft-story buildings. Los Angeles, for example, has the largest inventory of soft-story buildings with over 16,000 thus their compliance timeline is also the longest providing property owners with 7 years to complete the retrofit from the time that a Notice to Comply is issued.

In forming their recommendation, the Advisory Group also considered the owner’s need to secure funding, to retain professional services such as an engineer and contractor, to plan for temporary tenant accommodations, if needed, during construction (if the unit is a rental property), etc. As such, the recommendation from the group is to provide owners 5 years to complete the retrofit from the date of the notice to comply. The Advisory Group also recommended to allow up to two six-month extensions, subject to the discretion of the Building Official, if an extension is warranted.

Required Action by Owner	Submit Engineering Report*, Submit Retrofit Plans & Obtain Building Permit	Complete Construction	Total Time
Milestone	3 Years from Notice Date to the Owner	5 Years from Notice Date to the Owner	5 Years

**Cost of engineering report will vary depending on number of units, type of construction, etc. Costs may vary between \$500 - \$1,000 per unit.*

COMMUNITY INPUT:

The November 8th, 2018 community meeting was well attended with over 200 people primarily consisting of property owners of soft-story buildings or condominiums. The major concerns raised at the meeting are categorized below:

- Engineers and Contractors – Several concerns were raised about the ability of the owners to find quality/trustworthy engineers and contractors familiar with retrofit work. Many requests were made for the City to provide a list of engineers and contractors. The community members were notified that Pasadena typically does not provide recommendations for contractors or engineers as it can be misconstrued as a formal endorsement. However, community members were directed to the California State website to find licensed engineers and contractors. Staff noted that the department of consumer affairs also has great guidelines to select a contractor such as obtaining a minimum of three different estimates and checking references.
- Mandatory – A member of the public recommended that the ordinance be voluntary citing concerns about competing for contractors and the inflation of retrofit costs. Staff informed the community member that the retrofits are currently optional without the ordinance. Adoption of an ordinance will make the retrofits mandatory but will provide a timeline for compliance.
- Permit Fees – A few community members asked if the City would be waiving permits for the retrofit projects. Staff informed the community members that they would need to study the impacts in order to make a formal recommendation to City Council.
- Grant Funding – There were many questions regarding the implementation of any possible grant funding. Staff explained that the City had submitted a Notice of Interest application for the CalOES Section 404 Hazard Mitigation Grant Program. In December 2018, the City received notification that the proposal was selected to proceed with the application process.
- Parking Impacts during Construction – Several community members were concerned about impacts to the availability of onsite parking during construction and many asked that there be some relief granted by the City via the issuance of permits for overnight street parking. Staff has reviewed this question and has found that the City's Department of Transportation does issue temporary overnight street parking permits to properties where an active building permit is issued, but the owner(s) must request these permits.
- Parking Impacts – Several community members were concerned about the retrofit requiring a reduction in the size and number of the existing parking. Staff informed the community members that adjacent cities implementing similar seismic programs have reported that engineers and contractors have found creative ways to minimize parking impacts. The Zoning Administrator will also retain the ability to waive parking

requirements, such as a reduction in the size and/or number of parking, in order to complete the required retrofit.

- Timeframes – A few community members requested that a comparison be made between the timeframe provided in the draft regulations versus other local cities which have implemented a similar ordinance. A comparison can be found in the table below:

Jurisdiction	Submit Engineering Report for Appeal of Soft-Story Determination	Submit Retrofit Plans	Obtain Building Permit	Commence Construction	Complete Construction	Total Time
Los Angeles	N/A	1 year after receiving Order to Comply	2 years after receiving Order to Comply	N/A	7 years after obtaining retrofit permit	7 years
Santa Monica	2 years from date of Service of Order	3 year from date of Service of Order		N/A	6 years from date of Service of Order	6 years
West Hollywood	1 year after receiving Notice to Owner	2 years after receiving Notice to Owner	4 years after receiving Notice to Owner	4 years from Notice to Owner	5 years from Notice to Owner	5 years
Pasadena	3 years after receiving Notice to Owner			4 years from Notice to Owner	5 years from Notice to Owner	5 years

- Plan Review/Inspections – Some members of the community were concerned about the City having enough resources to perform plan review and inspections. Staff informed the community members that the City has the ability to hire consultants to help them with the work overflow if needed.

At the end of the meeting, members of the community were directed to the City’s webpage which contains information and resources about the proposed seismic program, and will have updated information posted as it becomes available. The presentation from the community outreach meeting was posted to the website and a link was also provided so that people may register their email to receive updated information as it becomes available. Community members were also encouraged to attend future meetings where this draft ordinance is discussed, including this meeting with the Public Safety Committee and the future City Council meetings. Based on the questions from the community outreach meeting, staff is currently developing a frequently asked questions (FAQ) document as an additional resource available of the website.

NEXT STEPS:

Staff will finalize the proposed seismic regulations to present to City Council at an upcoming meeting.

Respectfully submitted,

DAVID M. REYES
Director of Planning & Community
Development Department

Prepared by:

Sarkis Nazerian
Building Official

Attachment: (1)

Attachment A – Draft Regulations

