



**Bureau of  
Development  
Services**  
FROM CONCEPT  
TO CONSTRUCTION

**PDC** | PORTLAND  
DEVELOPMENT  
COMMISSION  
[www.pdc.us](http://www.pdc.us)



## **URM Seismic Retrofit – Retrofit Standards Committee Charter**

### **Role and Objective**

The URM Retrofit Standards Committee will serve as an advisory body to the City's URM Seismic Retrofit team in the evaluation and development of seismic code change recommendations to support the objectives outlined in the URM Project Description document.

### **Scope of Work of the Committee**

#### **General**

- Review agendas and meeting information in advance of the meetings.
- Attend meetings and provide input.
- Contribute technical expertise, ideas and opinions.
- Consider the interests and concerns of their organizations, the community at large, and other stakeholders regarding the development of the code change recommendations that will best serve the City.
- Serve as a communication conduit between the organizations they represent, other stakeholders and city staff.
- Review and provide feedback on draft staff recommendations.
- Provide testimony, as needed.

#### **Technical**

- Examine the existing URM seismic upgrade requirements established in Title 24.85.
- Consider if mandatory upgrades are feasible.
- Determine the standard and performance levels to which the URM buildings should be upgraded (use ASCE 41-13 as a basis) and at what point upgrades should be triggered.
- Determine how URM buildings where no changes of occupancy, tenant or seismic improvements (existing triggering events) are proposed will be impacted by the code change recommendations.
- Develop a building evaluation system that will require some level of mandatory ASCE 41 Tier 1 and Tier 2 seismic evaluation to be performed for each URM building.
- Create a ranking or prioritization system that will result in high vulnerability occupancies being retrofitted earlier rather than later. Consider whether all buildings should eventually be retrofitted.
- Propose a reasonable time frame within which committee recommendations should be implemented.

- Consider methodologies to require public identification of URM buildings that are easily accessible by the general public and potential tenants of a property.
- Summarize recommendations<sup>1</sup> in a report to be presented to the full committee.

**Decision Making Process**

The Committee’s input will be advisory to the City’s URM Seismic Retrofit Team which will use it to shape its recommendations to City Council. That said, to the greatest degree possible the Committee will work to achieve consensus in developing its advisory recommendations.

**Organization and Facilitation**

The Bureau of Development Services staff, in coordination with the City-wide URM Seismic Retrofit Team, will develop meeting agendas, facilitate meetings, and provide general staff support to the Committee. Meetings will be open to the public.

**Frequency of Meetings**

Orientation:	December 10, 2014
Retrofit Standards Committee:	December 2014 – spring 2015
Incentive Committee:	Spring 2015 – fall 2015
Policy Committee:	Fall 2015 – winter 2016
Staff recommendations to City Council:	Spring 2016

A Committee orientation meeting is scheduled for December 10, 2014 to educate both the Incentive and Retrofit Standards Committees about the project. Following that meeting the Retrofit Standards Committee will convene to develop code change recommendations. The Retrofit Standards Committee’s completed work will then be provided to the Incentive Committee to inform the development of incentive recommendations. We assume that the Retrofit Standards Committee will complete its work and the first meeting of the Incentive Committee will take place in spring 2015. We further assume that the Incentive Committee will meet an additional 3-4 times to complete its work. Once the work of both Committees are complete, the recommendations will be provided to the Policy Committee, which will conduct public input on the recommendations prior to presentation to City Council in late winter / spring 2016.

**Membership**

The Retrofit Standards Committee will have five core members representing:

- Structural Engineers.
- Architects.
- Geotechnical engineers.

All Committee participants are appointed by Commissioner Novick. In the event that a Committee member resigns, the City URM Seismic Retrofit Team will work with Commissioner Novick to identify and appoint a new representative.

---

<sup>1</sup> Recommendations should support recommendations from the Oregon Resiliency Plan – Business and Workforce Community section, February 2013  
 URM Retrofit Standards Committee Charter - Page 2 of 4

**Members**

<b>Name</b>	<b>Organization</b>	<b>Representing</b>
David Bugni	David Bugni & Associate	Structural engineers
Michael Hagerty	(Retired) City of Portland	Structural engineers
Blake Patsy	KPFF	Structural engineers
Brian Emerick	Emerick Architects and City Landmarks Commission	Chair of Architects and Historical Preservation
Ian Madin	DOGAMI	Geotechnical engineers

## Oregon Resilience Plan – Business and Workforce Community excerpts

- **Improve seismic performance of infrastructure for rapid community recovery**

Finding: Business and community cannot recover within two to four weeks due to inadequate seismic performance of infrastructure.

Action Needed: Upgrade existing infrastructure and increase seismic design standards for new infrastructure over the next 50 years to enable business and community recovery within two to four weeks.

- **Assess seismic performance of critical and essential public buildings**

Finding: The seismic vulnerability of critical and essential public buildings throughout Oregon has not been fully assessed.

Action Needed: The State of Oregon shall direct local jurisdictions to determine the seismic resilience of all critical and essential public buildings.

- **Develop seismic rating system for buildings to promote resilience**

Finding: Oregon does not have a seismic rating system for the expected performance of buildings subject to earthquake ground motions.

Action Needed: State should develop a seismic rating system modeled after Structural Engineers Association of Northern California rating system. The objective of this system is (1) to make buildings more resilient and usable after a Cascadia event and (2) to help communicate seismic risk to the general public.

- **Incentivize seismic upgrade of existing buildings**

Finding: The majority of buildings in Oregon were built before the code change of 1994 and thus do not meet current seismic building code standards. Seismic upgrading of these buildings is expensive and is typically only done when there is a change-in-use of the building, or when the buildings are substantially modified. If only a small portion of these buildings will be seismically upgraded over the next fifty years, then the potential loss of the business and workforce housing in these buildings will seriously impact the recovery of the economy following the Cascadia earthquake.

Action Needed: The State should consider incentives and other options to encourage building owners to seismically upgrade their buildings.

- **Reduce community vulnerability from unreinforced masonry (URM) buildings/non-ductile concrete buildings**

Finding: The Historic Preservation League of Oregon (HPLO) estimates there are between 5,000 and 10,000 unreinforced masonry (URM) buildings in Oregon.

Action Needed: State shall adopt the findings and recommendations in the 2012 HPLO Special Report, Resilient Masonry Buildings, and extend the recommendations to all non-ductile concrete buildings.