

2015

Unreinforced Masonry (URM) Seismic Retrofit Project:
Seismic Retrofit Support Committee Report

FINAL REPORT

December 9, 2015



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EXECUTIVE SUMMARY

The Cascadia subduction zone (CSZ) poses a great natural hazard in the region. The last decade has provided unexpected lessons in the enormous risks from giant subduction earthquakes. Sumatra 2004, Chile 2010, and Japan 2011 each caused devastation, billions of dollars in damage and took thousands of human lives. In addition, other local crustal faults (e.g. the Portland Hills fault) present additional, if not higher, risks because of their closer proximity to Portland. The 2011, 6.3 magnitude quake in Christ Church, New Zealand, is an example of the damage a crustal earthquake can cause.

Acknowledging these inescapable hazards, the City of Portland has embarked upon a process to improve the safety and the overall resiliency of the City including a review of the City's Unreinforced Masonry Retrofit (URM) codes (CC 24.85).

URMs are one of the City's most earthquake vulnerable type of structures and pose considerable risk to the life and safety of the public in a seismic event. According to the Bureau of Development Services (BDS) there are approximately 1,800 URM buildings in the City of Portland. These buildings have at least one bearing wall that is constructed of masonry with little or no reinforcement; and, often there are no structural attachments between the exterior wall, and the roof and floors of the building. Because they lack reinforcing and attachments, these buildings are prone to significant damage or collapse in an earthquake. While some URM buildings have been structurally improved, most are susceptible to serious damage in moderate and large earthquakes.

City Council directed staff to conduct research about URM retrofit best practices in other cities and to return to Council with policy recommendations including proposed code changes and assistance program(s) to support implementation. To assist in this effort, three advisory committees were assembled to provide expert input and guidance in the development of the staff recommendations:

- Retrofit Standards Committee (RSC),
- Seismic Retrofit Support Committee (SRSC), and
- Policy Committee

This report summarizes the activities of the SRSC which was charged with evaluating and recommending various options to help *private* building owners overcome barriers to complying with proposed code changes.

Some have questioned why the City should be involved in providing support or assistance to private building owners to improve their buildings. Private-owner earthquake losses are more than a simple collection of losses experienced by private owners. The risk of collapse poses a significant public hazard and the damage caused by an earthquake will impair the City's ability to function. The consequences of cumulative damage to Portland's building infrastructure make private building damage a public concern.

Although the public interest in the retrofit of privately owned buildings appears obvious to some, just how to provide support is not. The decision to improve building performance is very complex, and the cost and complexity of a seismic retrofit are often impediments to performance. No one incentive or action can adequately address the problem for all owners. Some owners lack access to capital; others have access, but a URM retrofit may not fit their lender's risk profile. Still other, especially smaller projects, will not pencil financially without grant funding. In the absence of workable options, building owners may simply have to sell or demolish the URM building.

The SRSC concluded that what is needed is a suite of options that can be tailored to the unique needs of each building and each owner. In addition, that government resources should be invested where they leverage the most life/safety impact for the greatest number of buildings at the least cost to the public.

The SRSC membership included representatives from a variety of stakeholders including financial, structural engineering, building owners, historic preservationists, developers and governmental agencies. In preparation for the committee's discussion, staff conducted extensive research about seismic retrofit assistance tools used in other cities. That research was summarized in a matrix organized into four broad categories which was used to facilitate SRSC discussions:

- Financial Assistance
- Policy
- Technical Assistance
- Information Support

FINANCIAL ASSISTANCE

Financial assistance tools that provide adequate access to capital or reduce the cost of a retrofit project were fully supported by the SRSC. Any eligible tool that increased access to capital (loan program, credit enhancement), reduced the direct costs of a retrofit project (grants, fee waivers, rebates, state/federal tax credits) or reduced the on-going financing and operating costs of the building (low interest loans, interest rate buy-downs, property tax abatement) should be pursued. By doing so, owners would have a suite of tools that could be assembled to meet their unique financial needs and thus increase the likelihood of owners' compliance with updated codes.

POLICY

There are a number of non-financial support tools that could facilitate seismic retrofits. The City's existing codes exempt seismic retrofit projects from triggering other building updates (fire, set-backs, landscape.) The SRSC strongly recommended that water and storm water upgrades be added to the list of exempted upgrades.

The committee also had a robust discussion about and recommended the development of a floor-area-ratio (FAR) URM Retrofit density bonus that owners could sell to help finance URM retrofits. Many felt this was a mechanism that had little direct cost to the City, but could provide a source of new capital to finance a portion of retrofit projects costs. The need to create a FAR market place where sellers and buyers can easily find each other was also discussed.

The committee also recommended the creation of an expedited permit review process; the assignment of one staffer within each bureau as project lead with authority to resolve project design conflicts; and the creation of a Seismic Retrofit Ombudsman position to help shepherd projects throughout the approval process with multiple bureaus and provide guidance about different financial assistance tools and how to access them.

TECHNICAL ASSISTANCE

The committee discussed a number of methods to provide technical assistance to support owners' performance. In addition to the Ombudsman position, the committee supported the idea of standardized retrofit design options that were preapproved with City bureaus (although some questioned whether standardization was possible.) The majority of the committee did not support the idea of a seismic retrofit contractor certification or of the City

assembling a pool of technical advisors. Most of the committee felt that the private sector could take care of itself without government assistance in these areas and that limited government resources were better spent on other strategies.

INFORMATION SUPPORT

The SRSC discusses five key topics in the Information Support category: Placarding; Public Awareness Campaign; a Building Rating System; Tenant Notification; and Real Estate Transfer Disclosure. They supported the idea of requiring placarding of buildings but only in the case of non-compliance with required rehabilitation standards and with adequate notification by the City before posting; supported the creation of a robust, multi-focused public awareness campaign; decided to defer evaluation of a building rating system until the US Resiliency Council publishes its rating system (see “End Note” at end of report); most of the Committee rejected the idea of tenant notification and felt this was better handled through the awareness campaign; and most felt that the real estate transfer disclosure was redundant to existing laws and practices.

The report that follows provides more detail about the process the committee engaged in to develop these recommendations and more nuances of their discussions.

BACKGROUND

SEISMIC HAZARD

The Cascade Subduction Zone (CSZ) in the Pacific Northwest runs approximately 625 miles from Cape Mendocino in California north to Vancouver Islands in British Columbia. It poses a great natural hazard in the region. Subduction zones produce the largest earthquakes in the world, and are the only zones that can produce quakes greater than magnitude 8.5 and of a duration of 4 minutes. The last decade has provided unexpected lessons in the enormous risks from giant subduction earthquakes. Sumatra 2004, Chile 2010, and Japan 2011 each caused devastation, billions of dollars in damage and took thousands of human lives.

The CSZ has produced 9.0 quakes in the past, the last of which occurred just over 300 years ago on January 26, 1700. The average return interval for such a quake is every 400-600 years. A quake of this size will cause immense shaking, liquefaction, and trigger landslides and tsunamis from British Columbia to northern California.

In addition, other local crustal faults (e.g. the Portland Hills fault) present additional, if not higher, risks because of their closer proximity to Portland. The 2011, 6.3 magnitude quake in Christ Church, New Zealand, is an example of the damage a crustal earthquake can cause.

CITY COUNCIL DIRECTION

Acknowledging these inescapable hazards, the City of Portland has embarked upon a process to improve the safety and overall resiliency of the City by preparing for and reducing the risk of loss from such catastrophic events. An element of that plan is to evaluate the adequacy of the City's buildings codes as it relates to seismic integrity, to update codes where necessary and to start with a review of the City's Unreinforced Masonry Retrofit (URM) codes (CC 24.85).

WHAT IS A URM BUILDING?

According to the Bureau of Development Services (BDS) there are approximately 1,800 URM buildings in the City of Portland. URMs vary considerable and range from one story to six stories and above; and include multifamily, commercial, industrial and public uses. The commonality of these buildings is that at a minimum each has at least one bearing wall that is constructed of masonry with little or no reinforcement; and, often there are no structural attachments between the exterior wall and the roof and floors of the building. Because they lack reinforcements and attachments, these buildings are more prone to significant damage or collapse in an earthquake. In addition, mortar weakens with age, further compromising the structural integrity of these buildings.

PORTLAND URM SEISMIC RETROFIT PROJECT

URMs are one of the City's most earthquake vulnerable type of structures and pose considerable risk to the life and safety of the general public in a seismic event. Yet these same buildings include some of the City's most historically significant structures – structures that define the character and culture of our neighborhoods and business districts – and account for a significant portion of the City's affordable housing stock. Our challenge is to figure out how to reduce the hazards these buildings pose while maintaining the historical, cultural and economic value they bring to the City. And, to do so in a way that is sensitive to the financial impact building retrofits will have on building owners – both public and private.

To this end, City Council directed staff to conduct research about URM retrofit best practices in other cities and to return to Council with policy recommendations including proposed code changes and assistance program(s) to support implementation.

The guiding principles for the development of the URM retrofit recommendations are:

- Protect the life and safety of the general public and building occupants;
- Support Portland’s emergency preparedness and economic resiliency;
- Preserve public and private investment in the City’s infrastructure;
- Lessen the financial impact and incentivize quick execution by building owners; and,
- Preserve the historical nature of URM structures, to the greatest degree possible and practical.

URM SEISMIC RETROFIT ADVISORY COMMITTEES

To assist in this effort, three advisory committees were assembled to provide expert input and guidance in the development of the staff recommendations:

- Retrofit Standards Committee (RSC),
- Seismic Retrofit Support Committee (SRSC), and
- Policy Committee

The RSC met six times between December 2014 and May 2015 and developed recommendations that include a URM building categorization system (based upon building height, size, occupancy level and use), updated retrofit codes linked to each classification, and a staged implementation plan that would require all URMs to be fully retrofitted within a 25 year period. These recommendations are detailed in the committee’s April 2015 report titled *Unreinforced Masonry (URM) Seismic Retrofit Project: Retrofit Standards Committee Report*.

The SRSC charge is to evaluate and recommend various options to help *private* building owners overcome barriers to complying with proposed code changes. This *Unreinforced Masonry (URM) Seismic Retrofit Project: Seismic Retrofit Support Committee Report* summarizes the work of the SRSC.

When complete, the work of these two bodies will be forwarded to a Policy Committee which will facilitate broader public input on the recommendations for staff to consider as it develops the final report for presentation to City Council in the summer of 2016.

WHY SHOULD THE CITY PROVIDE SUPPORT FOR THE RETROFIT OF PRIVATELY OWNED BUILDINGS?

Some have questioned why the City should be involved in providing support or assistance to private building owners to improve their buildings. Ultimately, owners are responsible for the

earthquake performance of their buildings. They, and their tenants, have the most to gain, or lose, from improved or compromised building performance. But, while a seismic retrofit will improve a building's structural performance, the investment does not necessarily translate into improved economic performance. And, while an owner may be legally obligated by code, economics will impact an owner's desire, or even ability, to perform required improvements.

The City, and society as a whole, has a strong interest in reducing the amount of damage that occurs to (and resulting from) privately-owned buildings. Private-owner earthquake losses are more than a simple collection of losses experienced by private owners and their tenants. The risk of collapse poses a significant public safety hazard and the damage will impair the City's ability to function. The consequences of cumulative damage to these buildings on neighborhoods, local businesses, the historic character of our city, post-earthquake housing availability and affordability, and commerce in general make private building damage a public concern. Less damage means quicker and less costly recovery for the entire city, as well as reduced social dislocation.

SEISMIC RETROFIT SUPPORT COMMITTEE (SRSC) PROCESS

COMPLEXITY OF THE EQUATION

Although the public interest in the retrofit of privately owned buildings appears obvious to some, just how to provide that support is not. The decision to improve performance is very complex, and the cost and complexity of a seismic retrofit are often impediments to performance. The decision is influenced by multiple, unique and often competing factors including the objective of the owners (which could be an individual, a private or publically traded corporation, a nonprofit or public agency), their financial circumstance, existing lease terms, and the type and function of each building. No one support tool or action can adequately address the problem for all owners. The SRSC concluded that what is needed is a suite of options that can be tailored to the unique needs of each building and each owner.

The SRSC Committee Process

The SRSC served as an advisory body to the City's project staff team. The committee met six times between May and November. Membership included representatives from a variety of stakeholders including financial, structural engineering, building owners, historic preservationists, developers and governmental agencies. The membership of the advisory

committee and the staff team is included in *Attachment A – SRSC Advisory Members and Staff Team*.

The committee's charge was to evaluate and recommend various options to help *private* building owners overcome barriers to complying with proposed code changes. This is an important distinction and limited the scope of the committee's review. The committee felt that public agencies potentially have access to different resources to pay for retrofit projects – resources not available to private owners – and that their work was better focused on the private sector where options were more limited.

THE SEISMIC RETROFIT COST ESTIMATING SUBCOMMITTEE

The RSC Report included a table that provided retrofit cost estimates by URM classification. (see *Attachment C - RSC Cost Analysis Narrative*.) Those cost estimates were developed using the *1994 FEMA-156 Typical Cost for Seismic Rehabilitation of Existing Buildings* publication as a guide, adjusted for inflation and locale. Given the age of the publication, many members of the RSC and SRSC questioned the resulting cost estimates and asked that additional analysis be conducted to support or refute the estimates.

A Seismic Retrofit Cost Subcommittee was formed including members from the SRSC and additional technical experts to provide input and feedback. The subcommittee met three times and exchanged information via Email in between meetings.

Gathering cost data was a significant challenge. Although supportive of the effort, many of the engineers and contractors we sought data from had limited capacity to volunteer support. Those that were able to provide data, provided information in gross numbers or cost per square foot estimates, with limited detail to enable a comprehensive analysis. Similarly, much of the information was dated and seismic cost estimates were imbedded in the costs of a larger renovation project.

We were successful in obtaining detailed, seismic only retrofit cost estimates for three sample buildings. PDC worked with the owners of these projects to evaluate multiple redevelopment options. As a part of that process the owners agreed to have an engineering firm conduct a seismic upgrade evaluation and develop a scope of work to retrofit the building to the proposed code. That scope of work was then sent to Architectural Cost Consultants (ACC) to estimate costs. The cost estimates excluded any non-seismic related construction work and also did not include other costs associated with historic preservation, tenant relocation or

staged implementation. The resulting ACC cost estimates, along with the additional cost information obtained through the research process, are summarized on the *Attachment B – Seismic Retrofit Project Cost Information*.

The purpose of the cost exercise was to support or refute the cost estimates in the RSC report, which were intended to provide an “order of magnitude” estimate of the cost to retrofit Portland’s stock of URM buildings. Although the data collected through the cost subcommittee process is not exhaustive, and the process clearly did not follow a scientific research process, the combined data appears to support the estimates developed using the FEMA-156 publication.

RECOMMENDATIONS

Staff conducted extensive research about seismic retrofit assistance tools used in other cities. That research was summarized in a matrix (see *Attachment D – SRSC Recommendation Summary and Matrix*) organized into four broad categories of individual tools (see Table 1 below.)

TABLE 1: SEISMIC RETROFIT ASSISTANCE TOOLS			
<p>FINANCIAL ASSISTANCE</p> <ul style="list-style-type: none"> • Loan Programs • Credit Enhancements • Interest Rate Buy-downs • Grants • Rebates/Fee Waivers • Property Tax Exemption • Fed/State Tax Credits • Accelerated Depreciation 	<p>POLICY</p> <ul style="list-style-type: none"> • Transfer of Development Rights • Expedited Permits and Review • Early Adopter Incentives • Right to Rebuild legislation or code • Non-permitted work waiver • Limited liability legislation • Non-conforming condition exemptions 	<p>TECHNICAL ASSISTANCE</p> <ul style="list-style-type: none"> • Standardized Retrofit Requirements • Process Navigation • Training Construction Professionals • Developing group of Technical Advisors • Retrofit Ombudsman 	<p>INFORMATION</p> <ul style="list-style-type: none"> • Placards • Public Awareness Campaign • Building Rating System • Tenant Notification • Real Estate Transfer Disclosure

This basic structure was used to facilitate discussion with the SRSC about individual tools. Each meeting focused on a different category of ideas, committee members discussed and debated

each option, and reached agreement (or not) on whether to recommend that option for further consideration. Between meetings, staff updated the matrix, adding a summary of the general discussion and placed individual tools in one of four color coded recommendation categories:

- Recommended – *Green*
- Not Recommended – *Red*
- In Place – *Blue*
- No Conclusion – Refer to Policy Committee – *Yellow*

An updated matrix was provided at the beginning of each meeting to confirm staff’s summary of the committee’s recommendations. What follows is a summary of the general discussion in each topic area and the conclusions SRSC reached within each category. The matrix provides more specific information about the committee’s recommendation of individual tools.

FINANCIAL ASSISTANCE

Financial assistance tools that provide access to capital or reduce the cost of a retrofit project were fully supported by the SRSC. The committee discussed the various tools listed and determined that each may have some value to different owners.

Building owners have unequal access to capital, so a loan product with flexible terms (interest rate, deferred and/or interest only payments, longer amortization terms) and/or underwriting standards would be critical to achieve compliance from this type of owners. Similarly, some owners have long established banking relationships and their projects may be able to bear the cost of a retrofit project. But, their lender may need further inducement to take on the risk of a URM building retrofit construction project, thus the credit enhancement option would be attractive to them. And the economics of some, especially smaller projects, just won’t work without grant funding. Without that type of assistance, this class of owners may simply have to sell, demolish the building or, if possible, self-finance the improvements and absorb the reduced return on investment (at least until the market begins to value seismically retrofit buildings.)

After some discussion about the merits of each financial assistance tool listed, the committee concluded that any tool that increased access to capital (loan program, credit enhancement),

reduced the direct costs of a retrofit project (grants, fee waivers, rebates, state/federal tax credits) or reduced the on-going financing and operating costs of the building (low interest loans, interest rate buy-downs, property tax abatement) should be pursued. By doing so, owners would have a suite of tools that could be assembled to meet their unique financial needs and thus increase the likelihood of owners' compliance with updated codes. They also identified that financial assistance tools could be designed as an "early adopter" incentive to encourage owners to act quickly by only providing some types of financial assistance for a certain period of time. In addition, they recommended that government resources be invested where they leverage the most life/safety impact for the greatest number of buildings at the least cost to the public.

POLICY

There are a number of non-financial support tools that could help to facilitate seismic retrofitting. Some the City already offers, others would take City Council or legislative action to implement.

The City's existing codes exempt seismic retrofit projects from triggering updates to fire safety equipment, landscape and street tree improvements. Others, such as water and storm water upgrades are not exempt. The SRSC strongly recommended that these two be added to the list of exempted upgrades.

The committee had a robust discussion about the value of a URM floor-to-area ratio (FAR) density bonus that an owner could sell to help finance required building upgrades. All members were in support of the concept and that it could provide a source of new capital with little or no cost to the City. In follow-up discussions among PDC and BPS staff, they concluded that the most cost effective options would be to create a program that would award a URM Retrofit FAR Bonus after an owner demonstrated the building was in full compliance with the 20/25 year retrofit standard. The owner could then sell the FAR bonus to recoup a portion of the retrofit costs.

This conversation also fostered a discussion about the need to provide more transparency and predictability within the existing FAR transfer system, and whether it was desirable to create an FAR market place that could facilitate the purchase and sale of FAR more broadly. The committee supported the idea of a FAR seismic bonus or transfer, but did not reach consensus on the FAR market place concept.

Many committee members shared stories about the difficulty of obtaining permits for seismic retrofit project and the multiple (and often conflicting) requirements from different bureaus in the permit approval chain. Some also experienced conflicting requirements within the same bureau when multiple staffers were involved in a project. The committee strongly recommended the creation of a seismic ombudsman position that could help shepherd projects throughout the approval process with multiple bureaus and provide guidance about different financial assistance tools and how to access them. They also recommended that one staff member within each bureau be assigned as a lead staff for each project, with the authority to make final decisions in the event that two staffers within the same bureau had conflicting views about how a project should be designed.

TECHNICAL ASSISTANCE

Designing, obtaining approval for, and then executing a seismic retrofit project is complex, even for a small building. It's reasonable to assume that most building owners personally do not possess the technical knowledge to complete a project and will require the help of technical experts. The committee discussed a number of methods to provide technical assistance to support owner performance. These included standardizing retrofit design options, additional discussion about the city ombudsman concept, creating a seismic retrofit certification program to train industry professionals in best practices, and assembling a pool of technical professionals that were vetted by the City that owners could access for technical assistance.

With some hesitation, SRSC members supported the idea of standardized, preapproved retrofit design options that would be pre-vetted with City bureaus. But given the unique nature of URM buildings, many questioned whether standardization was possible.

The members strongly supported the ombudsman concept, and felt it would be of great value in helping to navigate complex project approval and financial structuring processes. Most members did not support of the seismic retrofit certification concept nor the technical advisor pool. The majority of the committee felt that the private sector could take care of itself without government assistance in these areas and that limited government resources were better spent on other strategies.

INFORMATION SUPPORT

Until recently, the general public was ill informed about the level of seismic hazard in our region and many still question whether it could really happen “here.” The lack of periodic seismic events in Portland reinforces this denial because few have actual experience with the devastation an earthquake can cause.

If owners choose to strengthen their buildings to protect their investment, and tenants choose to occupy safer building, then the resulting upgraded buildings should be more valuable, right? But that’s not always the case. Many building owners and tenants do not know how their buildings will perform in an earthquake. Because of the lack of awareness of the seismic hazard, the market has not yet responded by placing value on seismically upgraded buildings.

Being better informed about seismic risk can result in more informed decisions about the level of risk an individual is willing to accept. And information can drive markets. Similar to LEED Building Certification, it will take a long-term, concerted effort and investment in a public awareness campaign for owners and tenants to begin to value seismic retrofits in the market place.

The SRSC discussed five key topics in the Information Support category: Placarding; Public Awareness Campaign; a Building Rating System; Tenant Notification; and Real Estate Transfer Disclosure.

There was considerable support for a public awareness campaign and that it should have at least three key dimensions:

- *General Public Awareness* – This element would focus on educating the general public about seismic hazards, building types and performance, and how to prepare.
- *URM Owner Education* – This element would reinforce the general public awareness campaign, and would include information specific to owners about the requirements under updated codes and how to comply.
- *Technical Experts* (e.g. engineers, architects, contractors) – This element would include portion of the general public and owner messages and would expand to include advanced design discussions and how to navigate the updated code compliance process.

The committee felt that the tenant notification requirement without education was not a good idea and could cause undue concern and panic. They felt that this issue was better handled through the public awareness campaign efforts.

The committee also discussed a building rating system and placarding buildings. As the discussion on the building rating system ensued we learned that the US Resiliency Council was in the processes of developing a national rating model. The committee decided to table discussion and to refer the topic to the Policy Committee for further discussion and possible adoption once the standards were released (see “*End Note*” at end of report.)

After deferring the building rating discussion, the committee agreed that the placarding strategy should focus on simple compliance with proposed City Code. The committee agreed that the City should issue a placard that the owner, at their discretion, could post on their building once the building was in compliance with revised codes. Alternately, if the building fails to meet required deadlines and thus is out of compliance with the code, the City (after reasonable notice) would require a placard to be placed in a prominent place on the building to inform the general public of the potential hazard.

Finally, the committee rejected the idea of a Real Estate Transfer Disclosure requirement for commercial URM buildings (seismic disclosure requirements already existing for single family buildings.) The SRSC felt it was redundant to existing disclosure laws. Additionally, that once the engineer’s building assessment report is filed with BDS (as would be required in the proposed codes) it becomes a matter of public record. Buyers can access it as a part of their due diligence process when investigating any possible building purchase.

END NOTE

The SRSC deferred discussion about developing a building rating system because the US Resiliency Council was exploring the same issue and had not yet published its recommendations. Formed in 2011, the USRC is a private nonprofit 501(c)3 that evolved out of work conducted by Structural Engineers Association of Northern California that began in 2006. The mission of the organization is to establish and implement meaningful rating systems that describe the performance of buildings during earthquakes and other natural hazard events, to educate the general public to understand these risks, and to thereby improve societal resilience.

Just prior to the final SRSC meeting, the US Resiliency County (USRC) released details about their new building rating system. They held a training session in Portland on November 16, 2015 to share information about the system which session two members of the SRSC and Carmen Merlo, Director of the Bureau of Emergency Management attended.

The final SRSC meeting on November 19 included a discussion about those recommendations but because the committee did not have adequate time to fully evaluate the rating system and its implications the committee did not reach any conclusion about whether to recommend adoption. That said, a number of members expressed concern about the system and strongly recommended that it be fully vetted by the Policy Committee before being considered for adoption by the City.

LIST OF ATTACHMENTS

ATTACHMENT A – SRSC ADVISORY MEMBERS AND STAFF TEAM

ATTACHMENT B – SEISMIC RETROFIT PROJECT COST INFORMATION

ATTACHMENT C – RSC COST ANALYSIS NARRATIVE

ATTACHMENT D – SRSC RECOMMENDATIONS SUMMARY AND MATRIX

ATTACHMENT A – SRSC ADVISORY MEMBERS AND STAFF TEAM

Name	Organization	Representing
Jessica Engeman	Venerable Properties	Developer/Historic Preservation
John Tess	Heritage Consulting	Developer/Historic Preservation
Avi Ben-Zaken	Urban Development Partners	Developers
Kristen Conner	Capital Pacific Bank	Finance
Colin Rowan	Malden Capital	Finance
Jennifer Cooperman	City of Portland, OFM	Government Agency
Rachael Hoy	City of Portland, BPS	Government Agency
Walter McMonies	Masonry Building Owners of OR	Owners/Historic Preservationist
Steve Rose	Bristol Equities	Owners
Tom Sjostrom	Building Owners and Managers Association	Owners/Property Manager
Mike Hagerty	(Retired) City of Portland	Structural Engineer

STAFF TEAM

Name	Agency	Role
Carmen Merlo	Bureau of Emergency Management	Overall URM Seismic Retrofit Project Manager
Shelly Haack	Portland Development Commission	SRSC Project Lead – Author of SRSC Final Report
Amit Kumar	Bureau of Development Services	RSC Project Lead – Author of RSC Final Report
Jonna Papaefthimiou	Bureau of Emergency Management	Overall URM Seismic Retrofit Project Coordinator
Peter Englander	Portland Development Commission	Team member
Andy Peterson	Bureau of Development Services	Team member
Eric Thomas	Bureau of Development Services	Team member

Attachment B - Seismic Retrofit Project Cost Information

Project Description/Name	Wong Laundry	Kida Building	Glade Hotel	Salvation Army	Skidmore Old Town	White Stag	The Hamilton	Trinity Apts	Overland Warehouse
<i>Data Source</i>	Architectural Cost Consultants (ACC)	ACC	ACC	Jessica Engeman	Jessica Engeman	Jessica Engeman	Steve Rose	Walt McMonies	Jesse Wolf/Grummel Engineering
<i>Address (or General Location)</i>	221 NW 3rd	318 NW Davis	18 NW 3rd	Close in SE MLK	14 NW 3rd	1st & Couch	NW22 & W. Burnside	NW20 & W. Burnside	209 NW 4th Ave
<i>Uses</i>	Museum/Office	Flex/Micro-Office	Comm/Restr. w/ Apts above	Comm/Retail	Comm/Retail	Comm/Retail	Retail	Multifamily	Comm/Retail
<i>Level of Retrofit</i>	To proposed code	To proposed code	To proposed code	ASCE-31?	To code	ASCE -31	Full	Partial	Full
<i>Year Retrofit</i>	Proposed	Proposed	Proposed	2012	2013	2005	2007	12-14	Proposed
<i>URM Classification</i>	3-4	3-4	3-4	3-4	3-4	3	3-4	3	3
<i>Stories</i>	2	1	3	3	2	4-5	1	4+ basement	3
<i>Square Footage</i>	9,600	9,000	7,500	26,704	8,000	125,750	4,500	46,000	29,000
<i>Historic Designation/District</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Was building occupied during retrofit?</i>	Vacant	Vacant	Occupied	Vacant	Vacant	Vacant	Vacant	Occupied	Vacant

Seismic Project Cost Data

Seismic Improvement Costs	662,860	130,015	907,369	555,000	225,000	1,901,100	161,919	1,050,581	735,700
Other Improvement Costs				2,845,000	775,000	17,098,900	-	-	2,525,490
Total Cost	662,860	130,015	907,369	3,400,000	1,000,000	19,000,000	161,919	1,050,581	3,261,190

Seismic Improvements - Cost per Square Foot

Wall Anchorage	5.06	2.13	5.39						
Parapet Bracing	1.95	4.82	5.08						
All other	40.74	3.04	73.22						
Subtotal Seismic Improvements	47.75	9.99	83.69	20.78	28.18	15.12	37.60	22.84	25.37
General conditions, contingency, OH/P	21.29	4.45	37.31						
Total cost per square foot	69.04	14.44	121.00						

Attachment B - Seismic Retrofit Pr

Project Description/Name	1	2	3	4	5	6	7
<i>Data Source</i>	Mark Tobin/ KPF	Mark Tobin/ KPF	Mark Tobin/ KPF	Mark Tobin/ KPF	Mark Tobin/ KPF	Mark Tobin/ KPF	Mark Tobin/ KPF
<i>Address (or General Location)</i>	Central Eastside/ Burnside	Same Property as in 1	Central Eastside/ MLK	Unknown	Unknown	Central City	Park Blocks
<i>Uses</i>	Retail	Retail	Retail	Unknown	Unknown	Church	Office
<i>Level of Retrofit</i>	Voluntary Upgrade only	Full Upgrade Estimate Moved forward with voluntary upgrades only	Full Upgrade	Full Upgrade w/ Ex. Finishes	Roof & Parapets only	Full Upgrade	Full Upgrade Cost Estimated in 2005
<i>Year Retrofit</i>	Unknown		2014	Unknown	Unknown	Unknown	
<i>URM Classification</i>	3-4	3-4	3	3-4	3-4	3-4	2
<i>Stories</i>	2	2	3	2	3	1	4
<i>Square Footage</i>	Unknown	Unknown	50,000	30,000	15,000	7,700	120,000
<i>Historic Designation/District</i>	Unknown	Unknown	Yes	Unknown	Unknown	Yes	Yes
<i>Was building occupied during retrofit?</i>	Unknown	Unknown	Vacant	Unknown	Unknown	Vacant	No

Seismic Project Cost Data

Seismic Improvement Costs							
Other Improvement Costs							
Total Cost	-	-	-	-	-	-	-

Seismic Improvements - Cost per Squar

Wall Anchorage							
Parapet Bracing							
All other							
Subtotal Seismic Improvements	17.00	28.00	36.00	59.00	13.00	86.00	42.00
General conditions, contingency, OH/P							
Total cost per square foot							

ATTACHMENT C – RSC COST ANALYSIS NARRATIVE

IV. Cost Analysis

Although not part of the charter of the Retrofits Standards Committee (RSC), the committee attempted to provide a broad framework of costs associated with the mandatory strengthening recommendations for the incentives committee to consider. These costs are not intended to be used to estimate the seismic retrofit costs for any particular building.

Rather, they are intended to provide an order of magnitude of upgrade costs for use in developing finance and incentive programs to compliment the mandatory upgrade policy proposed in this report. Costs for individual buildings can vary widely based on the strengthening methods employed, size of building, architectural finishes present, identified deficiencies, specific building characteristics, etc. Retrofit cost estimates should therefore be developed by a contractor and engineer/design professional on a building specific basis.

The estimated costs in Table 3 are based on the Federal Emergency Management Agency (FEMA) publication Typical Costs for Seismic Rehabilitation of Existing Buildings second edition (FEMA -156) and the Earthquake Risk Analysis report by Goettel & Horner Inc., 1995. Costs associated with the upgrade standards for URM 4 and 5 were not available in the FEMA or Goettel & Horner reports. For these classifications, upgrade costs were estimated based on local experience retrofitting these types of URM buildings.

Costs contained in FEMA-156 represent a major nationwide data collection, compilation and interpretation effort and thus provides the best available description of the typical costs of seismic retrofits for buildings of all types. The retrofit costs reported in FEMA 156 include the cost of strengthening structural elements, non-structural mitigation costs such as light bracing of ceilings, lights etc., costs associated with restoration of architectural finishes, and other project costs such as insurance, project management, and architectural and engineering fees (estimated at 30% of the total project cost). The cost of relocation associated with retrofit work was also taken into account. The Retrofit Standards Committee used a relocation value of \$9.00/Sq. ft. based on the Goettel and Horner Report adjusted for inflation (factor of 2.0) to arrive at a current relocation cost of \$18.00/Sq. ft. For each URM classification, the retrofit costs reported in FEMA 156 were also adjusted to account for: 1) regional levels of seismicity; 2) regional costs of labor and materials; 3) the building size per FEMA-156; and 4) the increase in cost of construction from 1995 to the present.

Table 3 below represents an estimate of cost for buildings in each URM category and assumes that 20% of the buildings in each class have either been demolished or upgraded and thus do not need to be seismically retrofitted.

Table 3

Seismic Retrofit Cost estimate by URM Class

URM CLASS	Upgrade Standard	Total Bldg. Area (million Sq. ft.) in URM Class	Construction Cost ¹		Total Costs ²	
			Cost/Sq. ft.	Total ³ (million)	Cost/Sq. ft.	Total ³ (million)
Class 1	Immediate occupancy	0.05	\$70.32	\$2.6	\$109.26	\$4.4
Class 2	Damage Control	3.17	\$48.39	\$123	\$81	\$205
Class 3	Life Safety	13.25	\$38.43	\$407	\$67.42	\$715
Class 4	Modified Bolts Plus	8.51	\$25 ⁴	\$170	\$50 ⁴	\$341
Class 5	Parapet/Wall Bracing	5.09	\$20 ⁴	\$82	\$20 ⁴	\$82

Footnotes:

1. Construction costs include structural costs, non-structural costs and restoration costs based on FEMA-156
2. Total costs include Construction costs plus other costs which are taken as 30% of construction plus relocation costs of \$18/Sq. ft.
3. Assumes that 20% of the buildings in each class have either been demolished or upgraded and thus do not need to be seismically retrofitted
4. Estimated costs based on local experience and not from a published value.

Cost recommendations: Retrofit Standards Committee recommends appointing a committee or to engage the services of a professional firm to develop accurate cost estimates for seismic upgrades for the mandatory strengthening program. The estimates presented above are very rough estimates and are to be used only as guidelines to frame the order of magnitude of the cost involved with implementing the mandatory strengthening program.

ATTACHMENT D – SRSC RECOMMENDATIONS SUMMARY AND MATRIX

RECOMMENDATION SUMMARY (DRAFT)

December 3, 2015

FINANCIAL ASSISTANCE	Priority	Level of Effort			Feasibility		
<i>Type of Support</i>	<i>1 high – 3 low</i>	<i>Funding Source Required</i>	<i>Technical Knowledge Available</i>	<i>Legislative Action Needed</i>	<i>Political Will</i>	<i>Public Support</i>	<i>Staff Support</i>
Seismic Retrofit Loan Program	1	Y – C	Y	Y – L	U		
Credit Enhancement	2	Y – C	Y	Y – L	U		
Interest Rate Buy-down	2	Y – C	Y	N	U		
Grants	1	Y – C	Y	Y – L	U		
Rebates	1	Y – C	Y	Y – L	U		
Property Tax Exemption/Abatement	1	Y – S	Y	Y – L & S	U		
State Tax Credit	1	N	Y	Y – S	U		
Accelerated Depreciation	2	N	Y	Y – F	U		

POLICY	Priority	Level of Effort			Feasibility		
<i>Type of Support</i>	<i>1 high – 3 low</i>	<i>Funding Source Required</i>	<i>Technical Knowledge Available</i>	<i>Legislative Action Needed</i>	<i>Political Will</i>	<i>Public Support</i>	<i>Staff Support</i>
Transfer of Development Rights/ FAR Bonus	1	Y – S	Y	Y – L	U		
Expedited Permits and Review	1	Y – S	Y	Y – L	U		
Add Water/Store Water to trigger exemptions	1	N	Y	Y – L	U		
Create Early Adopter Incentives	2	Y – C	Y	Y – L	U		
Post Disaster Right to Rebuild	3	N	Y	Y – L	U		

TECHNICAL ASSISTANCE	Priority	Level of Effort			Feasibility		
<i>Type of Support</i>	<i>1 high – 3 low</i>	<i>Funding Source Required</i>	<i>Technical Knowledge Available</i>	<i>Legislative Action Needed</i>	<i>Political Will</i>	<i>Public Support</i>	<i>Staff Support</i>
Standardize Retrofit Requirements/Methods	2	N	Y	N	U		
Process Navigation/Ombudsman	1	Y – S	Y	N	U		

INFORMATION SUPPORT	Priority	Level of Effort			Feasibility		
<i>Type of Support</i>	<i>1 high – 3 low</i>	<i>Funding Source Required</i>	<i>Technical Knowledge Available</i>	<i>Legislative Action Needed</i>	<i>Political Will</i>	<i>Public Support</i>	<i>Staff Support</i>
Placarding	2	Y – S	Y	Y – L	U		
Public Awareness Campaign	1	Y – S	Y	N	U		

Key

- Yes = Y
- No = N
- Unknown = U

Type of Capital Needed

- Capital = c
- Staffing = S

Legislative Action

- Local = L
- State = S
- Federal = F

FINANCIAL ASSISTANCE

RECOMMENDATION MATRIX (FINAL)

FINANCE	Type of Support	Description	Action Required to Implement <i>(see the SRSC Report for a summary of the financial assistance discussion)</i>
Recommended	Seismic Retrofit Loan Program	Capitalize a seismic loan program that can be used Citywide: <ul style="list-style-type: none"> • Work with area lenders to create a seismic retrofit loan program • SBA loans might be available for small businesses • Exercise authority under SB85 to create a Seismic Property Assessed loan security structure 	<ul style="list-style-type: none"> • Political will • Identification of an eligible capital source to fund the program • Engage with private lenders to gauge interest in a seismic program • Connect with SBA to learn more about their program operations • City or County would need to establish the Seismic Property Assessed program and create an administrative and capitalization strategy
	Credit Enhancement	Capitalize a fund that would provide credit enhancement for privately financed retrofits	<ul style="list-style-type: none"> • Political will • Identification of an eligible capital source to fund a credit enhancement mechanism.
	Interest Rate Buy-down	Capitalize a fund that would write down the interest rate on a seismic retrofit loan for a period of time (3-5 years)	<ul style="list-style-type: none"> • Political will • Identification of an eligible capital source to fund the buy-down.
	Grants	Grants to owners to defray some of the costs of a seismic retrofit	<ul style="list-style-type: none"> • City would have to prioritize use of the Community Development Block Grant (CDBG) (approx.. \$10 million annually) program for this purpose. Projects would have to qualify based upon CDBG’s low-income neighborhood benefit requirements. Competition for CDBG resources is high, as a result, opposition to realigning program priorities could be encountered. • Identification of an eligible capital source to fund a grant program.
	Rebates	Rebate seismic assessment costs for project that complete seismic retrofits	<ul style="list-style-type: none"> • Political will • Identification of an eligible capital source to fund rebates.

FINANCE	Type of Support	Description	Action Required to Implement <i>(see the SRSC Report for a summary of the financial assistance discussion)</i>
	Property Tax Exemption/ Abatement	<p>Create a URM seismic retrofit tax exemption program that would eliminate seismic retrofits from triggering a property tax re-assessment.</p> <p>Similarly, modify the historic preservation property tax abatement 'end of abatement re-assessment methodology' by establishing an "at completion assessed value" when the improvements are complete, to abate tax on increase between the before and after assessed value for a period of 10 years, then to use the "at completion assessed value" to re-establish assessments at the end of the abatement period.</p>	<ul style="list-style-type: none"> State legislation would be required, political support/oppositions from other taxing jurisdictions unknown
	State Tax Credit	<p>Create a State tax credit program to complement Federal Historic Tax Credit, but not only limited to historic buildings</p>	<ul style="list-style-type: none"> SB 565 was introduced in 2015 session to create a new State Historic Tax Credit program. It would have authorize the Dept. of Revenue to conduct an auction for tax credits to generate up to \$12 million annually to provide rebates to property owners for eligible rehabilitation expenses. The legislation did not pass. <p>The SRSC recommends supporting re-introduction of this legislation in 2017 and specifically endorsed by the City of Portland.</p>
	Accelerated Depreciation	<p>Create program to also accelerate depreciation of seismic retrofit improvements, similar to federal program available for clean energy upgrades.</p>	<ul style="list-style-type: none"> Would need to evaluate and identify federal political support to include seismic retrofit activities as eligible for accelerated depreciation. Likely a long term agenda that would be impacted by current federal tax reform discussions.
In Place	Seismic Retrofit Loan Program	<p>PDC's Commercial Property Redevelopment Loan (CPRL)</p>	<ul style="list-style-type: none"> PDC has a Commercial Property Redevelopment Loan (CPRL) that can be used for seismic retrofit projects in Urban Renewal Areas (URA). Program also requires project achieve/support other PDC policy objectives for which some projects may or may not qualify. To focus specifically on seismic retrofit, without policy overlays, program modifications would need to be approved by PDC Commission.
	Fee Waiver	<p>Waive permitting, plan check and plan review/variance fees for seismic retrofit projects</p>	<ul style="list-style-type: none"> City Code - 24.85.090 Fee Reductions. (Amended by Ordinance No. 178831, effective November 20, 2004.) Building permit, plan review and fire life safety review fees for structural work related to seismic strengthening covered by this Chapter will be waived when such fees total less than \$2,500, and will be and reduced by 50% when such fees would total \$2,500 or more.

FINANCE	Type of Support	Description	Action Required to Implement <i>(see the SRSC Report for a summary of the financial assistance discussion)</i>
	Grants	Grants to owners to defray some of the costs of a seismic retrofit	<ul style="list-style-type: none"> • FEMA Hazard Mitigation Grant Program (HMPG) and Pre-Disaster Mitigation (PDM) fund are available to State and Local governments, but generally not to private building owners (although a local jurisdiction could apply on their behalf.) Small annual funding allocations make this program of limited value (less than \$600K combined.) • HB 3526 passed in 2015 to establish a \$5 million “Oregon Main Streets Revitalization Grant program” within the State Park & Rec Department. It was amended in to reduce the funding level to \$2,500,000 and passed both the House and the Senate and is now on the Governor’s desk for signature.
	Federal Tax Credit	Federal Historic Tax Credit program can be used to fund seismic retrofits, New Market Tax credits can also be used when financing a larger economic development project in an eligible area.	<ul style="list-style-type: none"> • Federal Historic Tax Credit provides a credit of 10% of the construction costs of non-residential buildings built before 1936. That credit increases to 20% for certified historic structures. • NMTC are designed to spur economic development in distressed areas. NMTC might be a source of funds to the degree the project qualified based upon the programs eligibility requirements.

POLICY SUPPORT

POLICY	Type of Support	Description	Action Required to Implement/Summary of Committee Discussion
Recommended	Transfer of Development Rights (TDR)/Density Bonus	City of Portland to create a TDR system to facilitate and record the purchase and sale development right and to provide FAR bonuses for the retrofit of URM buildings that could be sold through the TDR system.	With some hesitation about creating a bureaucratic administrative process, the Committee expressed general support for the idea of creating a TDR system, including assistance with the sale of excess FAR to pay for seismic retrofits. Similarly, to connect the proposed density bonus the City is considering with a payment in-lieu-of fee that could capitalize a fund to support the purchase of URM-excess FAR. There was also discussion about the need to fix the existing TDR process to more attractive and to create an FAR recapture processes that would allow for the return of development rights in the event of a catastrophe.
	Expedite Permits and Reviews	Create an expedited permitting process including an ombudsman type roll to help navigate the process. In addition, create an expedited post-disaster permitting process to support recovery	Committee members supported the idea of expedited permitting process and creating an ombudsman position to help navigate the process. There was some discussion about the fact that some URM owners unfamiliar with development will likely need additional assistance moving through the process.
	Add Water/Storm Sewer to exemptions to nonconforming conditions allowed for seismic upgrade program.	Current City Code requires the upgrading of water and storm water systems be included in	Modify City Code 24.85.080 and any other codes necessary to include water and storm water non-confirming uses allowed for seismic upgrade projects.
	Early Adopter Incentive	Offer incentives on a time limited basis to encourage early adoption by building owners.	Committee members like the idea of developing early adopter incentives and there was discussion about different type of incentives that could apply, most being in the realm of financial assistance. Those ideas will be discussed in further detail during the financial assistance discussions.
	Post Disaster Right to Rebuild	Support City code/ordinance that would provide owners the right to rebuild post disaster and to retain any non-conforming use.	With some hesitation, there was agreement on the Committee to support post-disaster right to rebuild and to retain any non-conforming use. The discussion centered around the balance between the strategic use of a disaster to remove non-conforming uses and the need to quickly rebuild the city. Members cited examples where recovery was hampered by over-planning the rebuilding.
Not Recommended	Non-permitted work	Create a program to facilitate review of non-permitted improvements that might be preventing an owners from seismically upgrading the property	Committee members felt this idea was unrealistic.

POLICY	Type of Support	Description	Action Required to Implement/Summary of Committee Discussion
In Place	State Legislative Support that would: (cont.)	Limit owner liability so long as owner has had the building inspected, notified tenants of deficiencies and is diligently working to comply per City requirements	SB-775 passed during the 2015 legislative session and provides for this type of limited liability.
	Exemptions from nonconforming conditions	Exempt seismic retrofits from triggering property upgrades to address other nonconforming development (set-backs, parking, etc.)	City Code 24.85.080 Application of Other Requirements. City Code 33.258.070
No Conclusion – Refer to Policy Committee	State Legislative Support that would:	Induce owners of land adjacent to URM buildings undergoing seismic upgrades to allow reasonable temporary use of the adjacent lands for staging necessary to complete the required retrofit.	There was not consensus on these ideas. Many members disagreed with these concepts and felt that there would be considerable opposition from others (tenant groups, lenders, other property owners) that would call the political viability of the ideas into question. That said, members agreed to put these items in a “parking lot” for referral to the policy committee for re-consideration.
		Subordinate lease limitation on reasonable access to complete retrofits construction activity.	
		Require existing mortgage holders to subordinate to Seismic Retrofit financing needed to comply with code so long a certain limitations are met (50% LTV, 1.35 DCR)	

TECHNICAL ASSISTANCE

TA	Type of Support	Description	Action Required to Implement
Recommended	Standardized Retrofit Requirements/Methods	To the degree possible, standardize retrofit requirements and strategies	Members felt that some components (e.g. parapet bracing, wall tie-ins) could be standardized, but generally speaking standardization would be difficult given the variety of URM buildings and the different categories for retrofit. The comment “to the degree possible” was emphasized.
	Process Navigation	Assign a City staff as the seismic retrofit ombudsman to help building owners navigate project approval and financing option.	This concept was supported by the Committee and should be coordinated in with the Ombudsman concept outlined in the “Policy” section.
Not Recommended	Train Construction Professionals	Create a seismic retrofit certification program that would train industry professionals in all stages of the retrofit process.	Committee members felt that the recovery industry could take care of itself and any limited government resources would be better spent on other strategies.
	Technical Advisors	Assemble a pool of technical advisors (architects, engineers, contractors, others) that owners could access for technical assistance	
In Place	Specifically assigned BDS Seismic Retrofit Specialist	Assign a lead BDS staff as the primary reviewer and arbiter of seismic retrofit projects to insure standardization in the application and interpretation of City URM seismic retrofit requirements (e.g. frequent fliers program)	In place now

INFORMATION SUPPORT

INFO	Type of Support	Description	Comments
Recommended	Placard	<ul style="list-style-type: none"> • Create an URM Retrofit Placard that owners can voluntarily post in their buildings once they meet the City Code retrofit requirements. Language for the placard to be determined by the City • Create an mandatory URM placard that would be posted <i>if, after reasonable notice</i> by the City, if an owner fails to comply with the City Code requirements (similar to the red “U” used by the Fire Department) 	The SRSC agreed with the placarding recommendation of the Seismic Building Standards Committee (SBSC), adding that the posting of the placard on buildings that comply with the standards should be voluntary, and posting on for non-compliance should be compulsory.
	Create a comprehensive public awareness campaign	<p>General Public Awareness Campaign – a multi-media education campaign to increase the public’s awareness about:</p> <ul style="list-style-type: none"> • Earthquake risk in the Portland area. • Risks associated with different types of structures • What can be done to improve building performance • Availability of building assessments at BDS • How to prepare for an emergency/earthquake • What to do after an earthquake <p>URM (and other vulnerable building) owner education campaign</p> <ul style="list-style-type: none"> • Include key elements of the General Public Awareness Campaign • New retrofit standards and compliance timeline • Placarding options/requirements • Resources available to support the retrofit process • How to select a professional to evaluate your building • Samples of design standards? • How to select a design professional • How to select a contractor to perform the work 	<p>The SRSC felt that the most important part of “information support” was to create an awareness campaign to education the general public about earthquake hazards in our region, and how to prepare and react to them but in a way that informed but didn’t agitate or create undue fear.</p> <p>The Committee also felt that an additional element of the campaign would need to educate URM building owners, design and engineer professionals and contractors about the new requirements.</p>

INFO	Type of Support	Description	Comments
		Design/Engineer/Contractor Training <ul style="list-style-type: none"> • Include key elements of the General Public and URM Owner Awareness Campaign • Advanced design discussion • Process for obtaining plan approval(s) 	
	“Active Lender” Listing	Develop and maintain a list of lenders active in the market as a resource for owners as they explore different financing option.	<ul style="list-style-type: none"> • Assign responsibility to appropriate bureau and allocate on-going budget to cover staff time to research, develop and maintain the list.
No Conclusion – Refer to Policy Committee	Building Rating	Create standardized building earthquake safety rating system that influence property values	When the SRSC discussed this item a national building rating system was in development by the US Resiliency Council. The committee felt that a Portland-centric rating system would be redundant and possibly conflict with work that work. The committee recommended review of the work of the US Resiliency Council system when it is completed for possible adoption in Portland. The US Resiliency Council has just completed its work (Nov. 2015) and will be forwarded onto the Policy Committee for consideration.
Not Recommended	Tenant Notification	Require building owners to provide a copy of the engineers report as a part of the lease agreement	The SRSC did not adopt this recommendation. The committee was concerned that tenant notification, without education, would result in unintended consequence and that the issue of education was better approached through the public awareness campaign recommendation. In addition, the engineers report will be a matter of public record and available to anyone upon request, once filed with BDS.
Not Recommended	Real Estate Transfer Disclosure	Require building owners to provide a copy of the engineers report upon sale of buildings	The SRSC did not adopt this recommendation. The committee felt that is was redundant to current laws that require owners to inform potential buyers of known hazards or building deficiencies. In addition, the engineers report will be a matter of public record and available to anyone upon request. Buyer’s accessing BDS records as a matter of their own due diligence before purchasing a commercial property.