



## PORTLAND BUREAU OF EMERGENCY MANAGEMENT

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### **Unreinforced Masonry Building Policy Committee Meeting Summary**

Committee members present:

Margaret Mahoney (chair)  
Walt McMonies  
Brian Emerick  
Pastor Dennis Anderson  
Reid Zimmerman  
Peggy Moretti  
Ken Rust  
Matt Illias  
Tom Sjostrom  
Javier Mena  
Matthew Eleazer  
Tom Corollo  
Heather Hoell  
Sean Hubert  
Jen Sohm  
Jonathan Malsin  
Hermann Colas

Staff present: Carmen Merlo, Jonna Papaefthimiou, Shelly Haack, Amit Kumar.

Other City staff: Jessica Kinard, Alexandra Howard.

Margaret: Begin with overview.

Carmen: URM issue was presented to Council several times. In December we met to review the work done to date; this presentation reviews that material. We'll start with the URM building inventory.

Amit: We are updating a 20-year-old inventory based on permit records and site visits. The first review was performed by a tech; now a structural engineer is reviewing. We had 1,886 URMs on list, we eliminated about 101 but added about 70 we missed before, so the number is still around 1,880. Central Business District has the most buildings.

Only 18% of buildings have been updated or demolished in the past 20 years; it will take 100 years to achieve all the updates at this rate.

The Retrofit Standards Committee started with the existing city Title 24.85 rules. They were asked to gauge their effectiveness and consider whether mandatory upgrades should be required. If so, what standards and in what timeframe. Their findings were that the current code is not adequate and in other jurisdictions mandatory programs have been much more effective.

A passive trigger means upgrades are only required when the building owner makes changes (occupancy, roof replacement). An active trigger means URM buildings will need to be upgraded whether owner makes other changes or not.

Benefit cost analysis also showed that with occupancy rates of only 1 person per 1,000 SF there is positive cost-benefit to doing the upgrades to URMs.

Retrofit Standards Committee proposed a five-tiered system to apply to all buildings. Committee also proposed a timeline for the upgrades, intended to balance life-safety goals of program with need for building owners to plan and finance the upgrades.

The Committee also proposed other recommendations to: address other dangerous buildings, require tenant notification/potential buyer notification, and placarding to inform building occupants of risk. The Committee also supported the City adopting the US Resiliency Council building performance rating system.

The next big question is, "What does it cost?" We used FEMA data from 1994 to estimate; however, inflation and regional construction costs were factored in – as were relocation costs. We estimate that all the upgrades will cost about \$1.4 billion.

Walt: we checked 7-8 example buildings in Portland and they were in line with the FEMA costs.

Sean: On the apartment side, I see numbers that are much higher. You have to rip out all the interior furnishings and there are also relocation costs. We see \$150 / SF or more.

Walt: It cost me \$20/SF without floor diaphragms and doing wall tie-ins during tenant turnover.

Amit: Our numbers do include relocation costs up to \$18/SF. City costs would be about \$68 million. We are still refining that number.

Shelly: The Seismic Support Committee looked at how to make this work possible from a financial standpoint. Financial assistance included low-cost loans, credit enhancement, grant/rebate programs, state tax credits, and accelerated depreciation. The group concluded that all of these could work, depending on ownership structure, financial situation and access to other resources.

Policy assistance included floor-area-ratio (FAR) density bonuses, expedited permits and review, early-adopter incentives, post-disaster right to rebuild, and water/stormwater fee exemptions.

Technical assistance included creating standardized, pre-approved retrofit design options and an ombudsman to shepherd projects. Technical advisory pool was not supported because the "bang for the buck" was not enough – private market could do this just as well.

Information support included placarding, multi-faceted public awareness campaign, US Resiliency Council Building Rating System. The Support Committee did not initially have support for the rating system, nor did they have time to study this issue.

Matthew Illias: How does a FAR market work?

Shelly: FAR is limited by zoning. Right now, people can buy and sell SF within buildings but there is no place to get information about the market; transaction information is scarce and the FAR is hard to value.

Heather: Do proposed mixed-use zoning changes affect this?

Shelly: Rachel Hoy has been keeping us connected to this work and our recommendation still applies.

Jen: What about non-structural upgrades?

Amit: Yes they are included, required.

Walt: These upgrades are hard because I can't recoup the expenses with increased rents with residential tenants.

Jonathan: Commercial tenants are asking more and more about this.

Jen: Parents do prefer / seek schools that are retrofitted.

Margaret: Let's take a look at the charge. We need to understand what the Council is asking us to do. If you need an alternate, please inform Carmen and make sure the alt person is kept up to date.

Sean: Please add affordable housing into the work plan. Loss of SRO-type buildings contributed to rise in homelessness, so more regulation on low-rent buildings is a major concern.

Margaret: Any concerns with this? [None.] Meeting #3? Meeting #2 is historic housing.

Peggy: Can't resolve all those issues in one go.

Sean: No. But, there are higher costs and less income with affordable units. Affordable housing might need a whole new category in terms of upgrade requirements.

Tom: I'm also interested in buildings that are most challenged to meet these requirements. Perhaps a case study to review when we discuss.

Margaret: Some topics may need a bit more depth. Let's leave open the option of subcommittees. Other concerns?

Tom: I'm interested in more information about the buildings in the inventory – who owns them? How are they used?

Amit: There is more information about uses, heights, types of buildings in the URM inventory already – this information is included in the Appendixes of the Retrofit Standards Committee Report.

Peggy: A couple of data points that occur to me: a cost estimate of not acting? And economic benefit of doing the work – jobs?

Margaret: The earlier risk analysis provided some of that info. It could be updated.

Peggy: We proposed a state-rehabilitation tax credit and we did look at job creation and economic benefits of that, and they were positive. They don't directly translate but we can share it.

Tom: Liquefaction area is an element of the required updates – is there a map?

Amit: Yes, there is one

Margaret: Can we receive this?

Carmen: It's on the website, we can re-send link.

Amit: Local geology can vary, costs to mitigate liquefiable soils are high, but it is included as important for the owner to know so they can make informed decision about what level of retrofit and also whether demolition is a better choice in some situations.

Our database doesn't currently include yes/no in the liquefiable soils area.

Brian: The numbers are the biggest obstacle to doing this; I was hoping for more numbers. I talked to someone on the Cost Subcommittee, and they said numbers were really hard to come by. Perhaps we should consider hiring a consultant to figure this out.

Margaret: Did other jurisdictions have numbers?

Shelly: No. Not the details we want. The URM retrofits that have been done, their requirements were different, and their numbers are dated.

Amit: Agreed. The things they required were less expensive – as an example San Francisco only required Bolt Plus retrofits.

Margaret: Perhaps we can find some local case studies?

Amit: We tried to find some, all that we found were comparable to FEMA data we shared.

Sean: We're working with Colas Construction on apartment projects now, perhaps we can figure out some examples.

Hermann: What is the enforcement mechanism for this?

Tom: That 1994 date is just discrediting. We need more information. Can we ask BDS for who has open permits on seismic upgrades?

Walt: We said the same thing about the numbers at first. But surprisingly, we found the numbers were still similar.

Tom: If we could get some new numbers even if they are the same it seems much more credible.

Brian: We can't take 1994 to City Council.

Jen: PPS has some info but not apples-to-apples. We have more light concrete.

Margaret: I see a lot of head nods. Let's ask a couple of members to sit down with staff and work on the numbers. Perhaps if Amit and Carmen can work with Jen, Sean, Walt, Jonathon to look at numbers for current projects.

Shelly: We really tried this before. We had trouble making comparisons between building types. We had trouble extracting seismic numbers from other costs.

Margaret: Folks here have current information about their own projects, let's pull from those. It shouldn't be a big impact on staff.

Brian: I understand it was difficult to get costs before, which is why I suggested a consultant. We could direct them to some uses / building types we're interested in learning more about.

Peggy: IHI did the Julian Hotel in Corvallis, it is Section 8 housing and they did a retrofit while it was occupied.

Sean: We might be able to create a range with our own info. A consultant might give us more certainty.

Brian: Cost is single biggest hurdle. There will be a lot of pressure on where the numbers come from.

Matthew E: I can get a cost breakdown on that, Pioneer Waterproofing did most of the work.

Matthew I: There are cost estimators out there, can't we call and get rates?

Carmen: A range is probably what we would get. I would welcome suggestions for folks who do this work well.

Hermann: The best we can hope for is an idea, a ballpark. It costs money to get estimates and they have a very short lifespan. I am not sure we want to spend money to get more estimates that will still be guesses at best.

Javier: I would like more information about the tools. How would they work? Who could use them – who would benefit?

Shelly: The conversations on the tools was abbreviated because they could be set up differently depending on needs and they are broad approaches.

Margaret: Any further comments? [None.]