



RESEARCH BRIEF SERIES

MITIGATION MATTERS

AWARD RECIPIENTS

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\$5,422

FEMA defines mitigation as the effort to reduce loss of life and property by lessening the impact of disasters. Effective mitigation requires that we all understand local risks and invest in long-term planning to reduce risks and enhance community well-being.

PLACE AND PROCESS: EARTHQUAKE MITIGATION IN PORTLAND, OREGON

SUMMARY

Relationships between people and place are often considered during disaster recovery planning, but are less influential in mitigation plans developed before a hazard event. Participatory planning studies have pointed toward the role that sense of place can play in planning processes, but these lessons have yet to be studied in the highly technical spaces of mitigation planning. This research takes a case study approach to understand how sense of place influences mitigation planning processes.

The study examined a mitigation policy making processes in Portland, Oregon, involving the revision of statutes for retrofitting unreinforced masonry buildings. I reviewed over 100 documents related to the 4-year policymaking process, including meeting notes, public testimony, and legal proceedings. I also conducted 18 qualitative interviews with unreinforced masonry building owners, committee members, and city staff.

I coded documents and interviews using three interrelated sense of place categories: individual-place, community-place, and individual-community. Overall, the data showed that sense of place was influencing some aspects of the process. Unreinforced masonry buildings were tightly connected to building owners' sense of self (place identity) and were encoded with cultural and social meanings (place meanings).



The lefthand image shows a placard warning about entering an unreinforced masonry building in Portland OR. Photo credit: Sarah Mercurio, August 30, 2023.

The righthand image shows a destroyed brick wall after an earthquake. Photo credit: Oleksii Kohut, Shutterstock.

Identifying the influence of sense of place suggests potential for a place-informed mitigation approach that builds upon existing relationships to place, especially among those living and working in affected buildings. Such an approach requires closely partnering with the people who use the structures under consideration and designing mitigation that responds to people-place relationships. Further research is needed to understand how a place-informed approach can be operationalized.

KEY FINDINGS

- Individual-place. Committee members and building owners shared a vision of the values and potential future of Portland, but personal relationships to unreinforced masonry buildings made apparent the deep divisions between stakeholders.
- Community-place. The mitigation policymaking process did not assess cultural place meanings, a factor that led the Black community leaders to rally against process outcomes.
- Individual-community. Coalitions organized between those who felt unrepresented among committee appointees, as typical avenues to engage with mitigation planning processes failed.

POLICY IMPLICATIONS

- A place-informed mitigation practice requires partnering with the people who use the building or site on a regular basis.
- Identifying who uses a building and what those buildings mean to the communities using them is a pathway for evaluating whether or not the right stakeholders are being recruited.
- Once those individual-place relationships are identified, it is important to continue to acknowledge them throughout deliberation and design mitigation strategies that respond to those relationships.



*An unreinforced masonry apartment building in Portland, OR.
Photo credit: Sarah Mercurio, August 30, 2023.*

AUDIENCE

This research may be relevant to scholars studying the nexus of place and hazard mitigation, as well as practitioners who are interested in how to engage community members in hazard mitigation processes.

Full report: Mercurio, S. (2024). Place and Process: Earthquake Mitigation in Portland, Oregon. (Natural Hazards Center Mitigation Matters Research Report Series, Report 21). Natural Hazards Center, University of Colorado Boulder.

Available at: <https://hazards.colorado.edu/mitigation-matters-report/place-and-process>



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