

## Intro

- » Residents & jobholders living and/or working near the coast of Oregon are at risk to high-magnitude earthquakes and subsequent tsunamis.
- » Conducted focus groups & interviews to investigate experiences in earthquake and tsunami preparedness.
- » Utilized a grounded-theory approach to develop a theoretical basis to explain the facilitators & barriers of their experiences<sup>1</sup>

## Participants

- » 9 focus groups + 20 individual interviews
- » N = 77
- » Approx 1 - 1 ½ hr sessions

## Setting

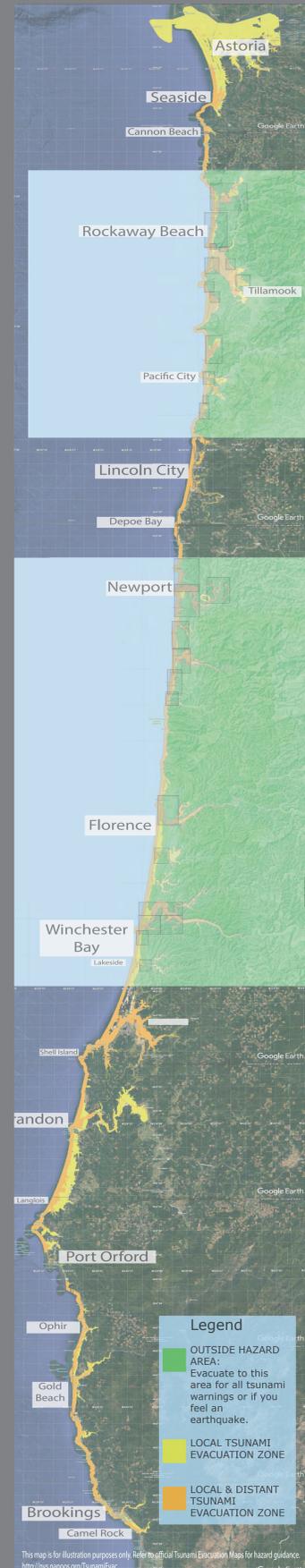


## Methods

QUAL Phase	Procedures	Products
IRB Dev & Approval	<ul style="list-style-type: none"> <li>Develop                             <ul style="list-style-type: none"> <li>» Project details, ethical treatment &amp; informed consent</li> <li>» Data security &amp; confidentiality</li> <li>» Interview protocols &amp; activities</li> <li>» Recruitment flyers</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Approved IRB</li> <li>» Procedures</li> <li>» Interview protocol &amp; activities</li> <li>» Transcription service</li> <li>» IRB Number: 20150615336EX</li> </ul>
Data Collection	<ul style="list-style-type: none"> <li>» Recruit participants: Email lists &amp; snowball</li> <li>» Conduct semi-structured interviews</li> <li>» Collect local info</li> </ul>	<ul style="list-style-type: none"> <li>» Audio recordings</li> <li>» Written memos</li> <li>» Maps, pamphlets, photos</li> </ul>
Data Analysis	<ul style="list-style-type: none"> <li>» Grounded theory</li> <li>» Analyze with NVivo12</li> <li>» Code: open, axial, selective</li> <li>» Develop axial diagram</li> <li>» Validate results</li> </ul>	<ul style="list-style-type: none"> <li>» Themes identifying factors</li> <li>» Axial diagram illustrating process to explain relationships &amp; process</li> </ul>

## Interpretation

- » Develop theory to explain the process of developing earthquake and tsunami preparedness among individuals who live and work near coastal Oregon.

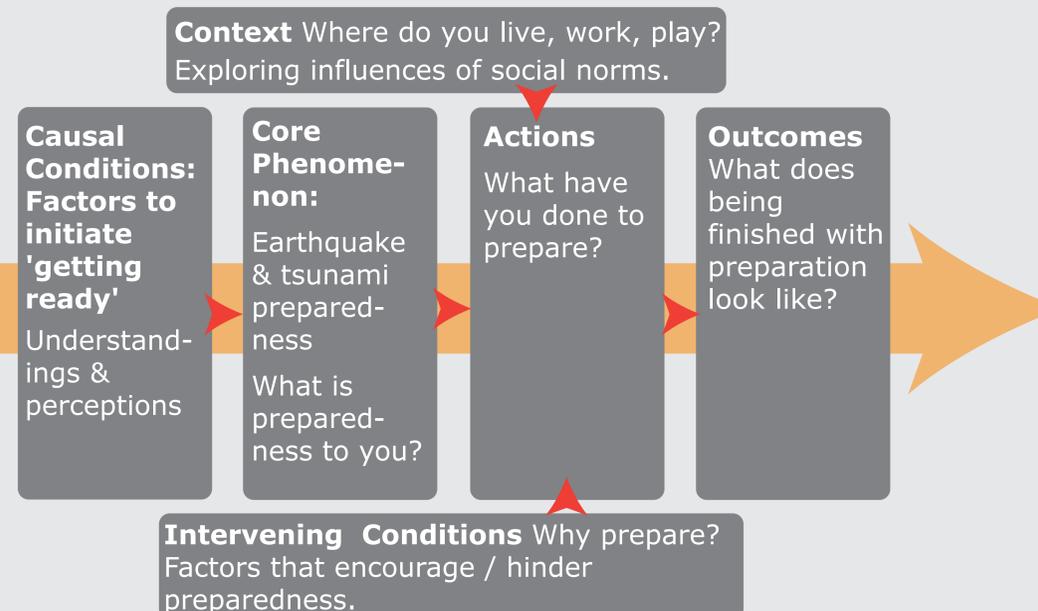


## Preliminary Take-aways

**Residents & jobholders along coastal Oregon need focused guidance on home mitigation to prepare for large earthquakes.**

**They also desire consistent messaging about tsunami evacuation from buildings.**

## Axial coding diagram<sup>2</sup>



## Preliminary Results

- » All study participants are actively in the process of preparing for earthquakes for themselves, their family members, & at work.
- » Varying approaches and extent of preparedness partially due to attitudes, skepticism, and conflicting info about potential size & impact of earthquake and subsequent tsunamis. Leading to attitudes of:
  - » Preparedness is a once and done activity
  - » Always preparing
  - » State of being prepared
- » Participants are aware of their location compared to tsunami evacuation zone.
- » Lack of awareness of helpful and inexpensive home actions.
- » Different sources (local, state, & national) provide conflicting tsunami evacuation zone messages (when in a building): Evacuate immediately vs after 30 seconds vs after earthquake stops.

## Next Steps

- » Analysis is ongoing
- » Contribute to future ShakeAlert & communication for preparedness

## Citations

- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- Axial coding diagram is a model to depict the relationships between the central phenomena and concepts. Learn more in Corbin, J. and Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing Grounded Theory (4th Edition)*. Thousand Oaks, CA: Sage Publications.

## Sponsors

