

Uses (or Types of Users & Products) of the USGS National Seismic Hazard Model (NSHM)

ATC/USGS Seismic Hazard User-Needs Workshop

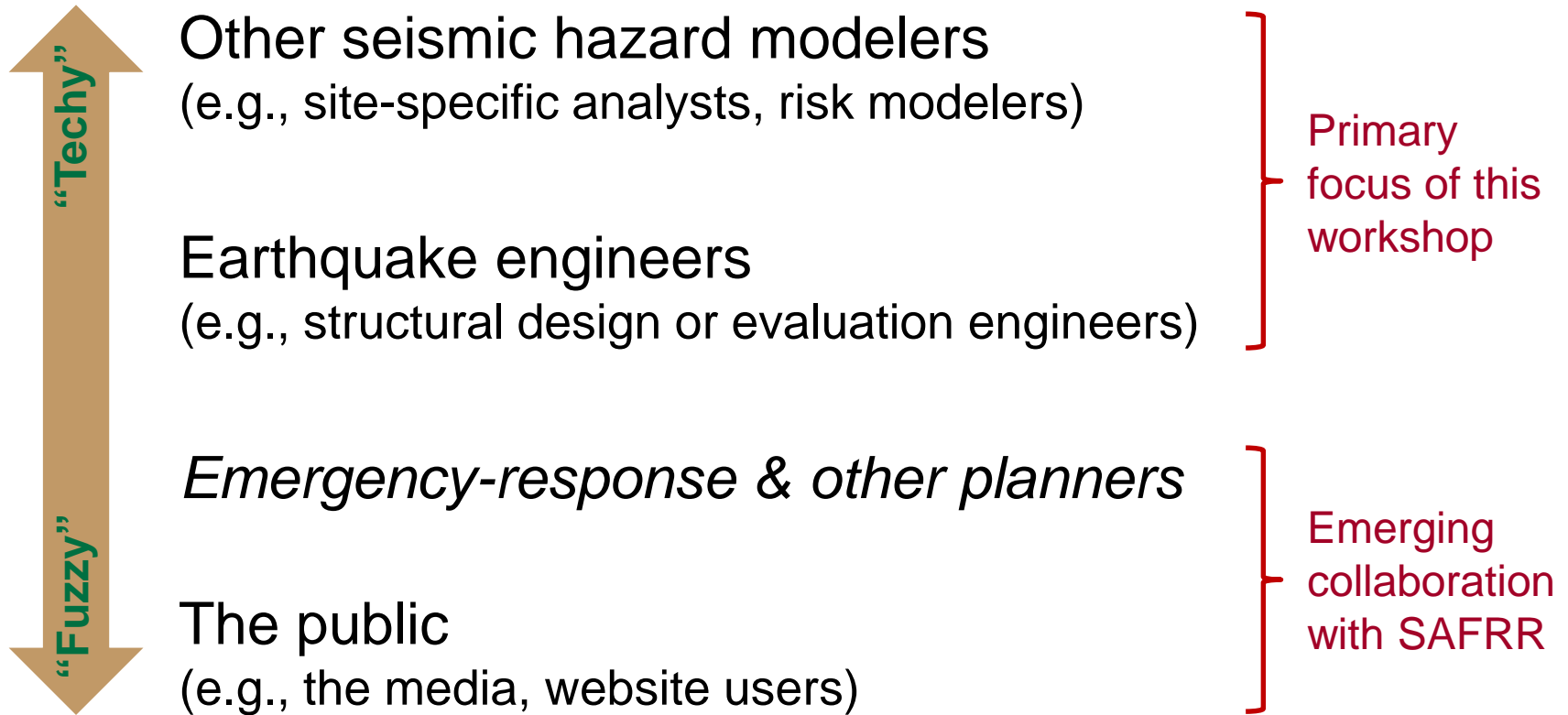
Nicolas Luco

Research Structural Engineer

Leader of NSHMP Seismic Design Maps Task

Co-Project Chief of Engineering Risk Assessment Project

NSHMP Audiences



Uses of NSHM

Input, i.e. ...

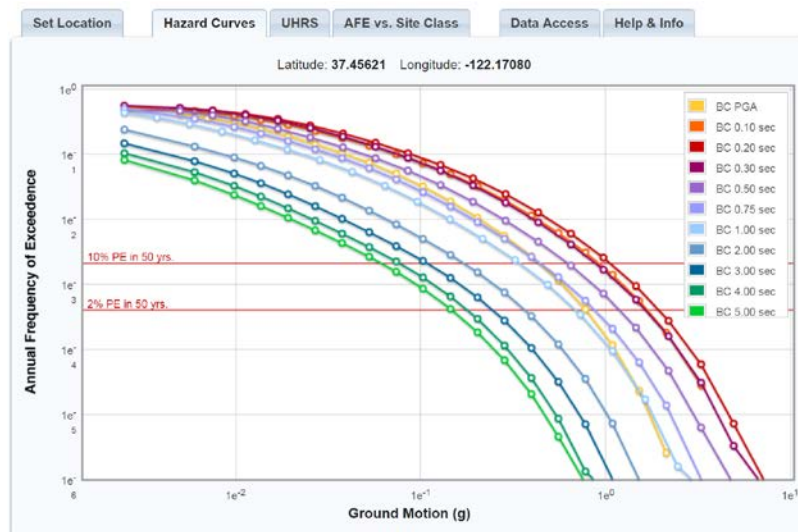
- earthquake source models (e.g., UCERF3)
- ground motion models (e.g., NGA-West2)

PSHA Software

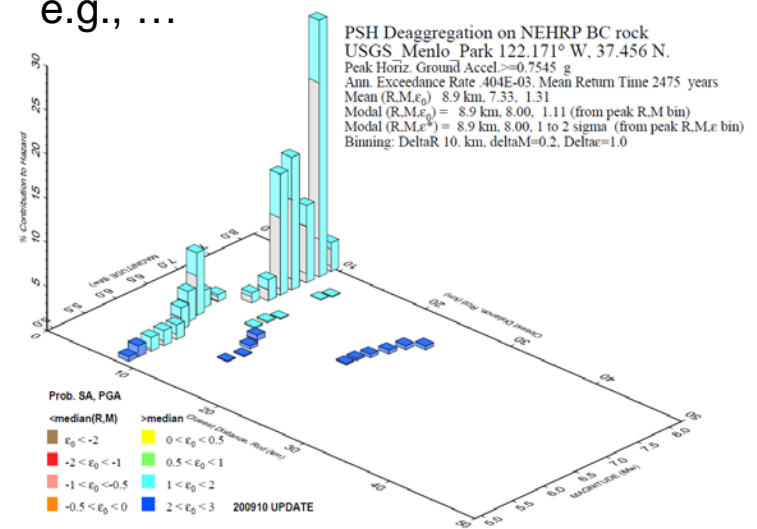
1. Input & Software
2. Hazard Curves/Maps
3. Other NSHM Outputs

Hazard Curves & Maps

Other NSHM Outputs



e.g., ...



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Uses of NSHM Input & Software

- Site-specific hazard modeling
- Portfolio risk modeling
- Surface fault rupture modeling
- ...

Uses of NSHM Curves & Maps

- Ground motions for designing, evaluating, or retrofitting structures
- Risk assessment for individual structures
- Seismic certification of equipment
- ...

Uses of Other NSHM Outputs

- Selection of seismograms for response history analysis of structures (deaggregation)
- Liquefaction assessment (deaggregation)
- Deterministic hazard assessment (scenarios)
- ...

Uses of NSHM

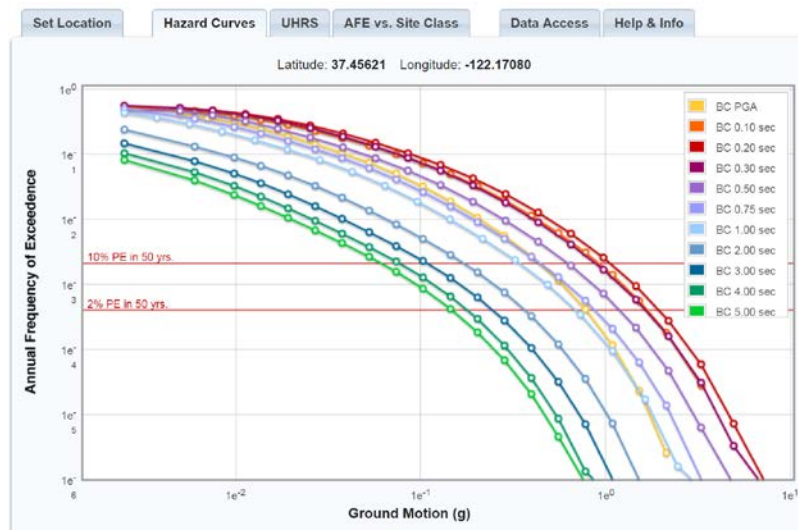
Input, i.e. ...

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- ground motion models (e.g., NGA-West2)

PSHA Software

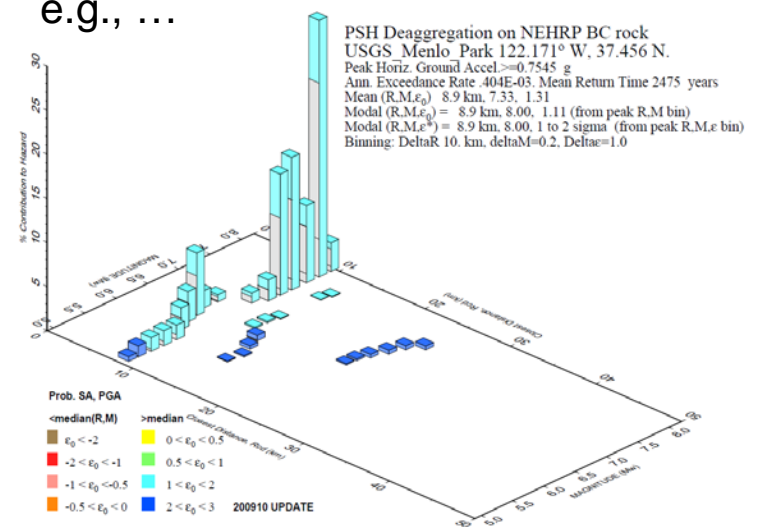
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Hazard Curves & Maps



Other NSHM Outputs

e.g., ...



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