

Fault Displacement Hazard Workshop

Yousef Bozorgnia, Ph.D., P.E.

Department of Civil and Environmental Engineering, &
Garrick Institute for Risk Sciences
UCLA

Yousef.Bozorgnia@ucla.edu

Pomona, CA, October 1, 2019

The Overall Project

- Is a community-based applied research project
- Started with USGS workshop
- Started very small
- Growing very fast with supports from
 - PG&E
 - SoCal Gas
 - Caltrans
 - CA High-Speed Rail
 - LADWP
 - CEC
 - ...



The Overall Project

- The common interest of all the supporting agencies
 - They have, or oversee, facilities located very close to faults
 - Or crossing faults
- The scope of the project is:
 - Collect empirical data of fault displacement worldwide
 - Carry out simulations
 - Develop multiple probabilistic fault displacement models for engineering applications



In workshop today, we will hear from

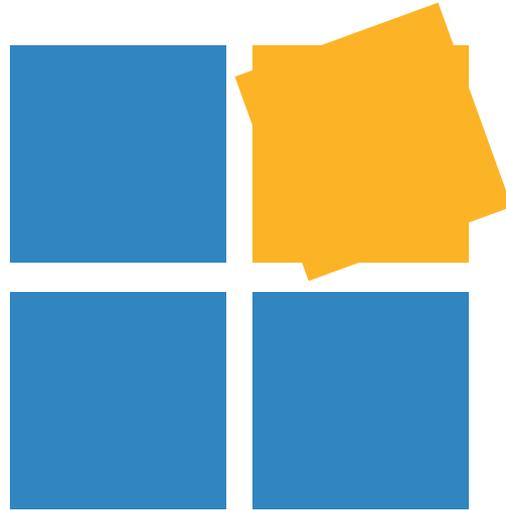
- End-users
- Database developers
- Scientists
- Modelers
- They will tell, as a community, what we have done so far
- What we plan to do in the near future
- Obtain feedback



Special thanks to:

- All sponsors of the project and workshop
- SCEC as a key partner
- Alex Sarmiento





Thank You

Welcome and Overview of Workshop Objectives

Christine Goulet,
Executive Director for Applied Science
SCEC, USC

*Oct 1st, 2019
Pomona, CA*

The background of the slide features a stylized, layered landscape. At the bottom, there is a dark red silhouette of a city skyline. Above this, there are several layers of light green and yellowish-green mountain ranges, creating a sense of depth and a natural setting.

SCEC Workshop on Probabilistic Fault Displacement Critical Issues, Data Needs, and Interface Plans

This workshop focuses on interface issues related to the development of new state-of-the-art probabilistic fault displacement hazard analysis (PFDHA) models.

The goal of this workshop is to engage a broad community of participants who can contribute, benefit and facilitate interactions across disciplines.

We will cover the needs from industry, the features of the empirical database being developed, the plans for supplementing the dataset with fault rupture simulations, and the plans for model building.

Objectives of PFDHA development

- Use current best science and new models to develop updated PFDHA models that better respond to users needs.
- Identify data (empirical, simulated) and knowledge gaps for future research and development projects.

Workshop-specific

1. Identify what PFDHA users and modelers need, what data is available, what simulators can provide.
2. Understand limitations of each teams and prioritize critical issues.
3. Identify/articulate specific research objectives supporting fault displacement hazards that can be incorporated in the 2020 SCEC Science Plan - and beyond.
4. Leave with a list of critical issues for a model release in 1.5 years, and a list of action items and follow-ups.

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