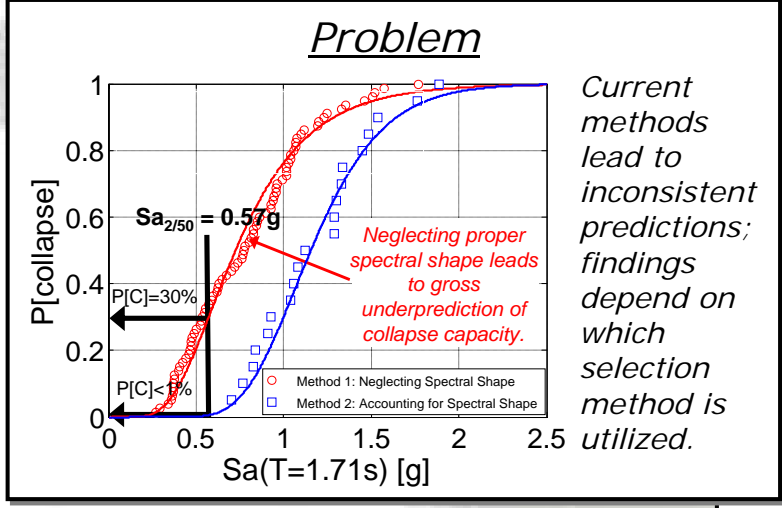


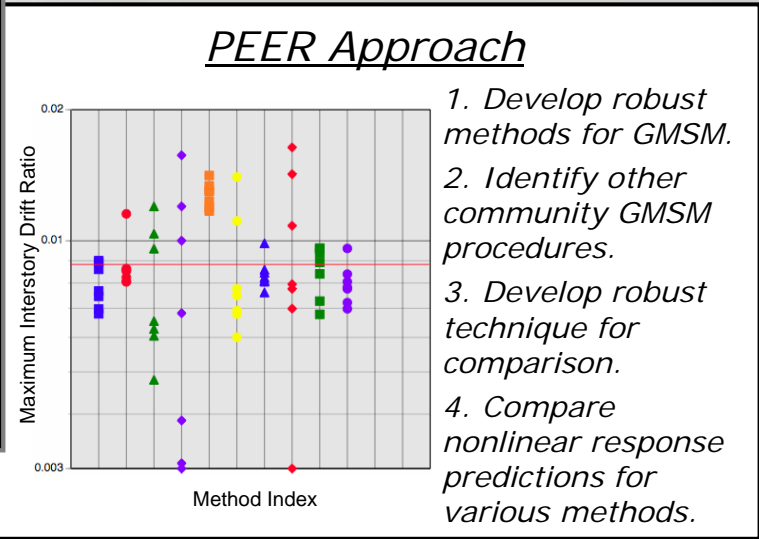
Ground Motion Selection & Modification for Nonlinear Analysis



We need to accurately predict how earthquake ground motions impact the built environment



Courtesy: C.B. Haselton (2006)



Courtesy: J. Watson-Lamprey (2006)

Current Efforts

The PEER GMSM working group is currently:

- Performing an objective evaluation of 17 prevalent GMSM methods.
- Collaborating closely with over 20 researchers, to establish community consensus.
- Using the findings to provide guidance for defensible ground motion selection.

Impact

- PEER findings have led to important modifications to the NEHRP provisions.
- Community consensus was developed at the 2006 COSMOS annual meeting, regarding use of scenario-based target spectrum.
- PEER ground motion methods are already being utilized in the performance-based design of tall buildings in California.

