

Who are the decision-makers, and what types of decision variables do they currently use to make decisions regarding bridge performance objectives? Includes pre-earthquake design, pre-earthquake maintenance, earthquake response, post-earthquake repair.

Decision Makers; Their Current DVs

Seismic Advisory Board	
CT Earthquake Engineering Specialist	Post-earthquake functionality level. Achieved by controlling ductility demand. Varies with bridge importance.
CT Traffic Operations	
CT Structure Maintenance	
Budget Managers	

CT Structure Maintenance DV

- Pre EQ considerations
 - Will the damage be visible
- Post EQ evaluation
 - What is the damage level?
 - What loads can be allowed?
 - Is it in danger of collapse?
 - Shoring?
 - Repair or replace?
 - What was the seismic design strategy?

What are the major gaps and shortcomings in current knowledge for evaluating bridge performance?

Are these gaps universally acknowledged, or are there distinctly different approaches and views of different decision makers?

Major Gaps

- Consideration of site specific parameters could produce more cost effective designs.
 - CAUTION - parameters could change in future years i.e., increased traffic count, impacting the original decision variable (DV). How would this be accounted for?

Major Gaps, cont.

- Are damage thresholds as currently estimated for Performance Level LS and CP appropriate for the stated action?
- CT design is no collapse under deadload for maximum credible event. If maximum event occurs is there capacity for LL?
- Need a better understanding of remaining capacity of EQ damaged members.

General Comments

- More explanation of how the currently defined DV's will be utilized and their impact through examples. (testbed?)
- Since the DV's are tied to performance levels, if applied to performance in previous EQ's how do the currently defined DV's fare?