Question Report

Report Generated: 1/18/2023

Webinar: USRC Seismic Retrofitting Grant Legislation

\# Question

1. Regarding Damage Assessment - Can you explain probably maximum loss regarding a seismic event?
    - “Probable Maximum Loss" is a term originally developed in the 1970's. The term remains and is widely used, but the practical definition has changed and is not uniform across the lending industry. The simplest and most widely used definition is the expected or average loss a building will incur in a seismic event with about a 500 year recurrence interval. "Loss" is defined as the repair cost of structural and nonstructural elements of a building (so, not contents) and is usually expressed as a percentage of the replacement cost of a building, and less often in pure dollar terms. a 500 year interval is used as it has traditionally represented a low frequency event comparable to a building code design recurrence (although building codes have since changed so that comparison is less applicable today). PMLs are more generically called Seismic Risk Assessments and are most widely used as a measure of the risk a bank or underwriter is assuming when lending or insuring a property. A "20% PML" represents a loss of 20% of the replacement cost in a 500-yr event and is a threshold used by many lenders above which they will not write a mortgage unless the borrower has sufficient earthquake insurance. 20% is a traditional threshold based on the down payment a borrower might provide on a loan, but of course that too is somewhat of an archaic basis.

The American Institute of Architects

AIA California
1931 H Street
Sacramento, CA 95811
T (916) 448-9082
F (916) 442-5346

www.aiacalifornia.org