

Fillmore Center

Seismic Assessment: PML, SEL, and SUL Studies
San Francisco, California



CLIENT

The Fillmore Center

CHALLENGE

WJE's client needed to quickly establish probable maximum loss (PML), scenario expected loss (SEL), and scenario upper loss (SUL) estimates for five multistory buildings.

STRUCTURE

The subject buildings are six- to nineteen-story structures with reinforced concrete bearing walls that were built using tunnel-form technology.

SOLUTION

WJE performed a seismic analysis of each structure to predict the extent of damage that might occur during a postulated earthquake. To make this effort as productive as possible, we took advantage of the fact that the structures had sustained some damage during a prior earthquake. Ground motion and damage data from the previous event were used to refine our computer models. WJE engineers worked with a construction cost estimator to provide damage repair and replacement cost estimates for the predicted extent of damage. We also developed retrofit concepts for improving the earthquake resistance of the facility.