form of overlay zoning since the first maps were issued in 1973. Although the Act only applies to about 84 cities and 33 counties, or 23% of all local jurisdictions in the state, and to a small percentage of the state's total land area, it has kept structures off fault lines throughout the state.

State geologic hazards mapping was expanded as a result of the Seismic Hazards Mapping Act of 1990. The new hazard maps are to show strong ground shaking, liquefaction and seismically-induced landslide potential.

Because of the significantly greater land area covered by these hazards, many more cities will be affected. Over a period of time, State mapping will require a growing number of cities and counties to administer the provisions of the Act. For any project proposed within seismic hazards study zones boundaries, mapped on USGS quad sheets at a 1:24,000 scale, developers must submit geotechnical reports and local jurisdictions must review them. Localities wishing to waive the required geotechnical reports will have to justify such waivers to the State. The geotechnical reports must describe geology and soils conditions, and address mitigation measures that might appropriately handle the identified hazard.

The relatively small scale and generalized mapping will require local interpretation to determine the specific boundaries of the State seismic hazards zones, so that individual parcels of land can be determined to be included or excluded. Rather than attempt this case-by-case, local jurisdictions may prefer to adopt local overlay zones. These provide clear procedures for local interpretation. By delineating State-mapped hazard zone boundaries in relation to local land parcels, the requirements for geotechnical reports may be more efficiently administered.

5.6.4 Disadvantages of Local Safety Overlay Zoning

Adopting and applying overlay zones may generate controversy from the objections of property owners, builders and developers. Opposition may derive from many sources. Concern for short-term profitability rather than uncertain, long-term negative consequences; lack of confidence in scientific appraisals of hazard; or fear about potential devaluation value of the land may all contribute.

There will also be opposition to additional hazard mitigation costs. Short-term costs would be offset in the long-term by reduced losses in future disasters. However, those bearing the short-term costs may not be the same people receiving long-term safety benefits. Adding to frustration are the uncertainty in scientific forecasting of disasters, imprecision of mapping many geologic features because precision requires costly site-specific investigation, and questions about the effectiveness of certain mitigation

measures, usually due to incomplete data.

Using hazards management overlay zones could add additional cost of implementation. The most obvious costs would relate to processing new development applications in the overlay zones. Such costs could be passed along to the development through application processing fees, thus avoiding an additional cost to the general taxpayer.

Perhaps the toughest policy question is retroactive abatement of nonconforming buildings and uses. This issue would need careful consideration during the preparation and adoption of such an overlay zone. However, the hazard exists regardless. Having an overlay zone simply forces the community to decide on acceptable levels of risk *before* a disaster strikes.