

5.3 DISINCENTIVES TO UNSAFE DEVELOPMENT

In the past, development in hazardous areas occurred for economic or aesthetic reasons. For transportation, fishing and recreation, early settlements grew on oceanfront land susceptible to liquefaction or flooding. Many cities are built along waterways, and thus on flood plains. Residential developments cover faulted or geologically unstable hillsides where the views can be spectacular.

Sometimes, the hazards were known and ignored. In other instances, the historical record of disaster was fragmented or nonexistent, and the presence of the hazard was revealed long after initial settlement. In yet other cases, the hazard eluded understanding, such as variability of earthquake shaking intensity across different geographic locations. Sometimes an undiscovered hazard is belatedly, tragically revealed. A large number of reinforced masonry buildings failed during strong ground shaking in the 1933 Long Beach earthquake, which led to the first important seismic updating of the building codes.

Good progress has been made in regulating new development to withstand strong ground shaking. Progress has been much slower in mitigation of other natural hazards and in strengthening of older buildings constructed under less stringent standards.

As the threat of a catastrophic earthquake in southern California has become clearer, it is equally apparent that many communities need to accelerate mitigation of natural and structural hazards. This is more easily accomplished in relatively new, suburban communities where development frequently occurs on raw land. It is more desperately needed in existing communities where land use and construction decisions did not recognize the hazards at hand.

A public policy framework is needed that offers economic incentives for natural and structural hazard mitigation as well as disincentives to unsafe construction. Use of incentives and disincentives has grown in recent decades as scientific, engineering and public policy research have focused on better hazard mitigation and loss reduction techniques. The following discussion outlines a variety of regulatory and economic disincentives and incentives, some of which are in use, under consideration, or appropriate in Riverside County.

5.3.1 Seismic Design Codes

Within the framework of local government, disincentives are sometimes indirect, i.e., unmodified and implemented through written or unwritten policy. Yet most significant reduction of building damage and casualties in earthquakes comes from written and adopted building codes. A discussion of the improvements associated with the 1997