catastrophic event. Such loans would be paid back through future premium receipts.

Passage of such legislation has been stalled by disagreement over whether Federally-required earthquake insurance should be accompanied by hazard mitigation in high-risk areas, to reduce the potential magnitude of losses over time. Similar principles underlie the Federal flood insurance program that has been in place for nearly two decades. That program has identified high-risk areas by issuance of Flood Insurance Rate Maps. Where the maps indicate high flood hazard areas, cities and counties must require hazard mitigation in their planning and zoning practices.

The argument in favor of mandatory mitigation says, those who are outside high-risk areas should not have to absorb costs of losses which might be avoided through proper hazard mitigation. The counter argument is that mandatory mitigation would increase local development costs in many communities where earthquake losses may not occur during the lifetime of those developments. Although the debate about required mitigation is far from over, as the probabilities of a catastrophic earthquake disaster increase each year, so does expectation that a compromise will be worked out.

5.2.4 State Earthquake Insurance

In 1996, the State legislature authorized formation of the California Earthquake Authority (CEA) to provide protection for homeowners' property. Total funding is $10.5 billion. Private insurers contribute up to $6 billion and the remainder comes from the reinsurance industry and Berkshire Hathaway (Kunreuther, 1999). With creation of the CEA, rates were raised and deductibles increased from 10% to 15%. This means that a homeowner who purchases insurance on a house valued at $200,000 would have to pay the first $30,000 in repairs. Under the CEA, the demand for insurance has declined dramatically, probably in part because of these changes. Market penetration of the CEA is estimated at one-quarter to one-half of the level prior to 1996. This raises questions about the cost of the CEA reinsurance, as it was based on assumptions of greater insurance sales and risk. According to the CEA, only 17% of California homeowner's have earthquake insurance. Regardless, as shown by the loss estimations prepared in Chapter 1 of this Technical Background Report, and those prepared for other scenarios (Shah, 1994), $10 billion coverage is inadequate.

5.2.5 Improvements Still Needed

Federal and State legislative trends toward establishing earthquake insurance programs hold out the promise of augmenting financial resources for disaster recovery. Such legislation could provide a valuable means by which to facilitate recovery and reconstruction. First, though, the efforts must be strengthened. There must be a pool of policyholders of adequate size to handle the problem of catastrophic losses; the pool must be expanded to include small businesses, and the programs must be directly or indirectly tied to structural retrofitting.

It benefits the County of Riverside to advocate strengthening of State and Federal earthquake insurance legislation. The County must understand that although California has in place a relatively comprehensive insurance plan, there must be Federal involvement to provide adequate catastrophic coverage. The County should track and seek passage of a version of the proposed Federal program, to be administered by the Federal Emergency Management Administration.