**Homeowner Seismic Retrofit Incentive Program**

*City of Berkeley*

*Departments of Planning, Housing, and Finance*

*Implemented 1992*

**Description**

The Seismic Retrofit Incentive Program is a joint effort under the Departments of Planning, Housing, and Finance. It provides two economic incentives for homeowners to conduct seismic retrofits to their homes. First, a local ordinance waives permit fees paid to the city for seismic retrofits on non-strengthened residences and unreinforced masonry structures. Secondly, up to 1/3 of the city’s 1.5% property transfer tax can be applied toward seismic upgrades of the property.

**Problem**

There are known hazards within the residential building stock in the Bay Area. Many cities address this concern through emergency response preparedness and educating homeowners. However, without offering any financial incentive, few homeowners are voluntarily retrofitting their homes. Until the homeowners start to retrofit vulnerable homes, the local governments are still faced with the potential of losing significant percentage of their housing stock in an event of a major earthquake.

**Solution**

The economic incentive program described above allows new homeowners to perform seismic upgrade of their homes for little out-of-pocket expense. For an average home of $400,000 in Berkeley, 1/3 of the property transfer tax that can be applied toward seismic upgrade amounts to $2,000. This amount can cover or significantly reduce the out-of-pocket cost to the homeowners on upgrades like water heater anchoring, brick chimney bracing, mudsill repair, sill plate anchorage, or foundation repair. Perhaps not all of the seismic deficiencies will be addressed by a single owner, but as the properties change hands, and each new owner takes advantage of the economic incentive, the housing stock as a whole will be significantly safer over time. In addition, Berkeley offers a free tool lending program that will cut down the retrofit cost even more for do-it-yourselfers.

**Examples**

The City of Berkeley has the highest seismic retrofit rate among all the cities in the Bay Area (based on survey data published by ABAG in 1999). Although other factors contributed to this, such as awareness and free tool lending, the economic incentive program is clearly what sets Berkeley apart from other cities. Currently, the City of Berkeley estimates that about 40% of single-family homes have had some kind of seismic improvements.

**Resources**

The resources for this program are the city and its taxpayers. As of September 2002, upwards of 12,000 projects have been completed, representing over $2M in permit fees waived, and a transfer tax rebate totaling over $6M. In addition, many homeowners paid for retrofit cost beyond the tax rebate amount, and provided their own labor.
Adaptability/Sustainability

The Berkeley Seismic Retrofit Incentive Program is an economic incentive program that can be adopted by other cities. The cities that already have high seismic safety awareness and high transfer tax will be most likely pass such a measure. San Leandro, San Jose, Fremont, Albany, Sunnyvale and Foster City all have award winning seismic improvement or awareness programs. Local lawmakers should be urged to sponsor ballot measures to incorporate the economic incentive program into municipal codes and ordinances. If such ballot is up for vote, local voters will need to be educated. EERI could assist in an education effort.

The Berkeley program was passed with a simple majority of 50% back in 1992. However, current state law requires a super majority of 67% for these measures to pass. The super majority requirement may make it more difficult for other local governments to pass similar measures. However, all data indicates that economic incentive really works in motivating homeowners to strengthen their homes, and this potentially difficult task is worth the attention and effort.

The sustainability of such programs depends on their effectiveness. The Berkeley program is now 10 years old, and its effectiveness has made Berkeley one of the most improved cities for one- and two-family residence seismic safety in the Bay Area.