



FEMA

Cape Mendocino Seismic Retrofit Retrofit Program for Lower-Income Homes

Humboldt County, CA - On April 25 and 26, 1992, three powerful earthquakes rocked the Cape Mendocino area of Northern California. Three major faults meet at this point forming one of the most seismically active areas in the United States.

Effects of the series of earthquakes were greatest in Humboldt County, with significant damage reported throughout. Hundreds of homes slid off foundations. Some buildings experienced separation of roofs and exterior walls. Over 1,000 homes were damaged and 200 were demolished due to structural inadequacies.

The Redwood Community Action Agency (RCAA), based in Eureka, CA, is a non-profit organization for Humboldt County. The Agency received \$324,000 through the FEMA Hazard Mitigation Grant Program (HMGP) to retrofit homes of low income owner-occupants. This grant, combined with funds from local sources, provides funding for what has become the Seismic Safety & Retrofit for Residential Structures Program.

The program has specific target areas throughout Humboldt County and combines seismic retrofitting with housing rehabilitation. The goal is to assist individual low/moderate income homeowners directly in financing appropriate, cost-effective seismic retrofit activities. A unique aspect of this program is the integration of the HMGP money into the RCAA's ongoing housing program. All funding sources combined provide approximately \$1 million.

To date, the projected number of low-income family homes benefiting from this program is 100-125 at an estimated \$3,000 per house.

American Red Cross and California Office of Emergency Services data show a total of \$37.2 million in estimated damages to 1,194 residences resulted from the Cape Mendocino event. The ongoing vulnerability of Humboldt County for future earthquakes is well documented. Historically, risk is clearly demonstrated. While a non-structural benefit/cost model has not yet been developed for use to verify this projects cost effectiveness, experiences of the Northridge earthquake demonstrate that non-structural retrofit projects are cost-effective mitigation. Potential savings from the reduction of repetitive property damages, relocation/displacement expenses as well as the human toll clearly outweighs the cost of the RCAA Seismic Safety & Retrofit for Residential Structures program.



**Humboldt County,
California**



Quick Facts

Sector:

Public

Cost:

\$1,000,000.00 (Estimated)

Primary Activity/Project:

Retrofitting, Structural

Primary Funding:

Hazard Mitigation Grant Program (HMGP)