## FINAL PUBLIC NOTICE

## CALIFORNIA EARTHQUAKE AUTHORITY SOFT STORY PROGRAM FOR RESIDENTIAL SEISMIC RETROFITS LOS ANGELES, SAN FRANCISCO, ALAMEDA, AND CONTRA COSTA COUNTIES, CALIFORNIA HMGP-4407-104-149

The U.S. Department of Homeland Security Federal Emergency Management Agency (FEMA) proposes to provide federal financial assistance under the Hazard Mitigation Grant Program to the California Earthquake Authority (CEA) to implement the Earthquake Soft-Story (ESS) Program, which would include the retrofit of approximately 714 single-family residential buildings in Los Angeles, San Francisco, Alameda, and Contra Costa counties (proposed action). Soft-story residential buildings are those with large garage doors or openings at the lowest level, which significantly reduces the ability of the remaining walls to resist earthquake forces. Some of the residential buildings that would be retrofitted under the proposed action may be located within a floodplain. Pursuant to Executive Order 11988 (Floodplain Management) and FEMA's implementing regulations at Title 44 of the Code of Federal Regulations Part 9, FEMA hereby provides interested parties with a notice of its final decision and an explanation of the alternatives that were considered.

The proposed action would reduce the seismic vulnerability of soft-story residential buildings by bolting the structure to its foundation and bracing ground floor and garage door walls. ESS retrofit work would be done around the garage door and on the side and back walls of the residential building. The work may include (1) adding anchor bolts between the wood stud walls and the foundation to prevent the building from sliding; (2) adding plywood to the ground floor walls to help prevent the building from collapsing off its foundation; and (3) bracing the walls at the garage door by adding a steel column, steel frame, engineered shear wall, or plywood bracing to the walls on either side of the garage door. Residential buildings that would typically qualify for ESS retrofits would have no age restriction on when they were built, have a soft-story condition at the lowest level, sit on level ground or a low slope, and feature wood-frame construction. Staging and access would occur in the area adjacent to the crawl-space access/opening, typically next to the driveway or side yard of the property. Retrofits may be completed in one to three weeks and would not require land acquisition or right-of-way or access easements.

Maps of proposed action areas within the floodplain are available for public inspection. Parties interested in receiving a copy of these maps should contact the FEMA Region IX Environmental Officer using the contact information provided in this notice.

Two alternatives were considered for the project: Alternative 1, No Action and Alternative 2, Proposed Action. Under Alternative 1, no action would be taken to protect soft-story residential buildings. If no action is taken, these buildings could be destroyed or damaged to the degree that they are uninhabitable. Many homeowners may be unable to afford to rebuild their homes, resulting in displacement and disruption in access to jobs, health care, child care, and other crucial services. Therefore, Alternative 1 is not recommended.

Under Alternative 2, the proposed action would retrofit single-family, soft-story residential buildings that are vulnerable to collapse or significant damage following an earthquake, potentially resulting in casualties, injuries, the inability to shelter-in-place or reside in the building, and/or substantial repair costs. The ESS Program offers property owners up to \$7,000 to cover costs associated with residential building retrofits aimed at minimizing structural damage, allowing building occupants to shelter-in-place, and limiting disruptions to local communities following an earthquake. Currently, there is no other code-compliant seismic retrofit alternative available.

FEMA has determined that the proposed project is the only practicable alternative available; therefore, the proposed action must be in the floodplain. The proposed action would have no significant adverse impact on the floodplain and would benefit ESS Program participants by reducing risks from the effects of an earthquake on existing soft-story residential buildings. Thus, measures to minimize impacts on the floodplain are not necessary. CEA has declared that the proposed action conforms to local floodplain standards, and would be responsible for the management, construction, and maintenance of the proposed action.

Additional information about FEMA's proposed action may be requested by writing the FEMA Region IX Environmental Officer at FEMA, 1111 Broadway, Suite 1200, Oakland, California 94607, or <a href="mailto:fema-rix-ehp-documents@fema.dhs.gov">fema-rix-ehp-documents@fema.dhs.gov</a>. All requests should be postmarked or received no later than 15 days after publication of this notice. No action will be taken before this date.