One critical step that property owners can take to prepare for the next major earthquake is to voluntarily retrofit their properties. Seismic retrofits are well-known, cost-effective and non-disruptive way to significantly reduce earthquake hazards, keep families safe and protect a homeowner’s investment in their property. For many Oakland homes, an effective retrofit would only cost a few thousand dollars but could prevent hundreds of thousands of dollars in damage resulting from a major earthquake. For a limited time, the City of Oakland is offering seismic retrofit grants to owner-occupants of homes in the Bay Area to encourage homeowners to complete these retrofits.

Hayward Fault overdue for a major earthquake

The next major earthquake on the Hayward Fault, which runs through Oakland, can strike at any time. Newly revised estimates from the United States Geological Survey (USGS) indicate a 72% chance that a magnitude 6.5 or larger quake – almost the size of the 1989 Loma Prieta quake – will strike the Bay Area in the next 30 years. The City is located by the Hayward Fault, perhaps the county’s most dangerous fault due to its highly urban location and the long period of time since the last major quake. The USGS estimates that all Bay Area faults, the Hayward Fault has the highest likelihood of a major earthquake in the next 30 years. Experts have cautioned that a powerful, damaging quake can be expected at any time.

Oakland homes at high risk of quake damage

A magnitude 7 earthquake on the Hayward Fault, experts estimate that approximately 24,000 housing units in Oakland will become uninhabitable and 67,000 people will be displaced. According to a report issued by the Association of Bay Area Government “idores (usually no-pro-World War II houses that are not covered by their foundations or lack bracing of walls enclosing a crawl space, cripple walls, accounted for over 2,300 of the 16,000 housing units made uninhabitable by the Loma Prieta earthquake.” As compared to other cities in California, Oakland has relatively older, more vulnerable housing stock. Any home built prior to the adoption of Oakland’s modern building code in 1976, 82% of the housing stock, that has not received a seismic retrofit is at significant risk of damage due to seismic activity. Some of the most severe earthquake damage to single-family homes is caused by the home shifting off its foundation. This damage can be devastating, in extreme cases resulting in total collapse of the cripple walls. Residents can be seriously injured and the house could be rendered uninhabitable. The cost of repairing this type of damage, which is not covered by homeowners insurance, can exceed the value of the home and result in permanent displacement of residents. Even though retrofits are relatively affordable, only 20 to 40% of older homes in the Bay Area have been strengthened.

Cost-effective retrofits protect families, prevent severe damage

Although it is not possible to eliminate all of the risks associated with earthquakes, a code-compliant seismic retrofit is a cost-effective way to prevent severe damage and keep occupants safe from injury or even death. Retrofitting for single-family homes includes installing bolts to prevent a home from slipping off its foundation and strengthening the walls within and around its crawl space to prevent collapse. Non-structural measures can also protect your home and family. Some of the most serious post-earthquake damage is caused by fires started when gas lines rupture. One very inexpensive way to prevent these fires is to ensure a home’s water heater is strapped to prevent tipping and that utility line connections are flexible to prevent breakage. Another cost-effective, potentially life-saving measure is to partially remove and cap a masonry chimney to prevent collapse.

Total retrofit costs depend on a variety of factors, but can cost less than $5,000.

City expects to serve hundreds with new grant program

Learn more about how to prepare for, survive and recover from earthquakes. The City of Oakland has launched a new website at oaklandnet.com/homeretrofit with links to more information about financial assistance and other resources. Interested property owners may also email residentiallending@oaklandnet.com or call (510) 238-6164.

Earthquake-Safe Homes Program for 1-4 Unit Homes

The Earthquake-Safe Homes Program is available to owner-occupants of homes with one to four units.

- Grants to finance seismic retrofit. Home must be the owner’s primary residence.

- Priority will be given to homes constructed or permitted for construction prior to 1974.
- Grant funds may only be used for code-compliant seismic retrofit measures, which include foundation bolting, installation or concrete or steel wall reinforces. Home must be the owner’s primary residence.

- Gran funds may be used for seismic retrofit grants to cover 75% of total project costs. Additional loan funds may be available to help property owners finance the remaining 25%.

Safer Housing for Oakland Program for “Soft Story” Apartment Buildings

The City of Oakland is also providing grants to rental property owners to retrofit valuable “soft story” apartment buildings.

- Grants to rental property owners to finance seismic retrofits of “soft story” buildings in Oakland.

- Eligible buildings: five or more units of rental housing, constructed before 1971 and meet the City’s definition of “soft story building” for this Program (typically a ground floor with a parking use or larger garage with windows underneath called “second story”).
- Grant funds may be used for seismic retrofit of the “second story” condition using design criteria approved by the Building Official.
- Allowable costs include permit fees, contractor costs and engineering fees.
- Gran funds cover 75% of total SEHP allowable costs. The required owner match is 25% of project costs. Additional loan funds may be available to help property owners finance the remaining 25%.

City of Oakland Offering Residential Retrofit Grants to Address Seismic Hazards