



Home Earthquake Retrofit Program

Full Mitigation Best Practice Story

King County, Washington

Seattle, WA – The Phinney Neighborhood Association (PNA) is a very proactive community group located in the City of Seattle. For many years the organization has sponsored programs and activities that have built a strong sense of community.



Following the Loma Prieta earthquake of 1989, program director Roger Faris and members of the PNA realized that the earthquake hazard they faced in Seattle was as great as that in California. They decided to incorporate an earthquake safety program into the existing Well Home Program. In 1998, the City of Seattle was selected as one of the sites to receive disaster mitigation funds under the Project Impact initiative. The funding was used to develop the "Home Retrofit Program," a comprehensive program to reinforce a typical Pacific Northwest home's ability to withstand earthquake movement.

The Home Retrofit Program is a partnership between Seattle's Department of Design, Construction and Land Use, the University of Washington, PNA, Washington Mutual, Bank of America, and the Office of Housing. Each partner has contributed critical elements which make the program successful for the average homeowner. Specific items include plans for home retrofit projects; streamlined processes for obtaining building permits; professional training for builders and contractors; special retrofit loan products; grants for low- to moderate-income homeowners; and a tool lending library. The program is offered as a training workshop and scheduled through PNA.

A unique feature of the program is the tool lending library. "Half of doing any job well is having the right tool," states Faris. PNA members can borrow tools for a modest weekly tool maintenance fee, and in some cases, at no cost. Having the right tools readily available for homeowners' use provides additional incentive for retrofitting homes.

When the Nisqually Earthquake struck the Seattle area in February of 2001, the Phinney neighborhood experienced a severe shaking. Following the quake, Faris received many phone calls from "graduates" stating how secure they felt because they had retrofitted their homes.

Previous earthquake damages have resulted in an average cost for home repair of \$30,000, plus the cost of a licensed contractor at about \$3,000. Homeowners' cost to do the work themselves averages \$1,000.

The Home Retrofit Program offers the following benefits: safer homes to protect lives and property; lower repair costs; less damage to utility connections, which reduces fire hazard; availability of home retrofit loans; and a greater opportunity to obtain earthquake insurance.

Activity/Project Location

Geographical Area: **Single County in a State**

FEMA Region: **Region X**

State: **Washington**

County: **King County**

City/Community: **Seattle**

Key Activity/Project Information

Sector: **Private**
Hazard Type: **Earthquake**
Activity/Project Type: **Retrofitting, Non-structural**
Structure Type: **Wood Frame**
Activity/Project Start Date: **10/1989**
Activity/Project End Date: **Ongoing**
Funding Source: **Homeowner; Local Sources; Private funds**
Funding Recipient: **Property Owner - Residential**
Funding Recipient Name: **Phinney Neighborhood Association**

Activity/Project Economic Analysis

Cost: **\$1,000.00 (Estimated)**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **No**

Value Tested By Disaster? **Yes**

Tested By Federal Disaster #: **No Federal Disaster specified**

Year First Tested: **2001**

Repetitive Loss Property? **Unknown**

Reference URLs

Reference URL 1: <http://neic.usgs.gov/>

Reference URL 2: <http://emd.wa.gov/>

Main Points

- The Home Retrofit Program is a partnership between Seattle's Department of Design, Construction and Land Use, the University of Washington, the Phinney Neighborhood Association, Washington Mutual, Bank of America, and the Office of Housing.
- Each partner has contributed critical elements which make the program successful for the average homeowner.
- Specific items include plans for home retrofit projects; streamlined processes for obtaining building permits; professional training for builders and contractors; special retrofit loan products; grants for low- to moderate-income homeowners; and a tool lending library.



Roger Faris, Program Director, Phinney Neighborhood Assn., Seattle, WA



Models used by Roger Faris for the Home Retrofit Program.