

# United States Senate

WASHINGTON, DC 20510

March 6, 2018

The Honorable Lisa Murkowski  
Chairman  
Subcommittee on Interior  
Committee on Appropriations  
United States Senate  
Washington, D.C. 20510

The Honorable Tom Udall  
Ranking Member  
Subcommittee on Interior  
Committee on Appropriations  
United States Senate  
Washington, D.C. 20510

Dear Chairman Murkowski and Ranking Member Udall,

Given the additional funding made available by the recent spending agreement, we write to reiterate the request we made in May that you provide increased funding for the United States Geological Survey's earthquake-related programs as you develop final Fiscal Year 2018 appropriations legislation – specifically, \$16.1 million for the development, operation, and maintenance of the West Coast Earthquake Early Warning System, ShakeAlert.

The U.S. Geological Survey—in conjunction with the California Institute of Technology, the University of California, Berkeley, the University of Washington, the University of Oregon, the University of Nevada, Reno, and Central Washington University—is currently working to adapt the technology for the West Coast of the United States. The consortium has developed a prototype system for test users along the West Coast, including San Francisco's Bay Area Rapid Transit, the Los Angeles County Metropolitan Transportation Authority, Boeing production facilities in Washington, and Intel production facilities in Oregon.

During the 2014 earthquake in Napa County, California, test users at UC Berkeley received 10 seconds of warning, and those in San Francisco and San Jose received even more. This is enough warning to take steps necessary to prevent casualties and mitigate destruction, including slowing or stopping trains and cars; pausing medical procedures; turning off supplies of oil, natural gas, and chemicals; securing large manufacturing equipment; stopping elevators and opening their doors; and securing sensitive computer data.

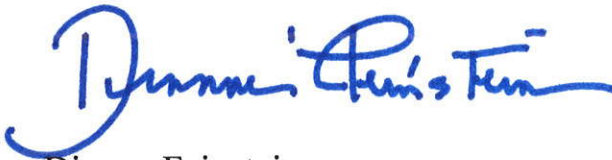
Earthquake Early Warning technology is already fully operational in countries like Japan and Mexico. Mexico built its early warning system after the catastrophic 1985 earthquake that killed thousands of people. That system is widely credited with saving countless lives in the most recent September earthquakes.

The effectiveness of Earthquake Early Warning largely depends on the number and placement of sensors to ensure that there is adequate coverage wherever an earthquake may hit. Congress provided \$10.2 million in the Fiscal Year 2017 Consolidated Appropriations bill, but more funding is necessary to purchase and install hundreds of additional sensors in order to provide an accurate and timely public warning.

In light of the additional non-defense discretionary funding made available by the recent spending cap deal, we urge you to provide at least \$16.1 million for the development and operation of the ShakeAlert system so that the West Coast will be prepared for the next catastrophic earthquake. This is proven technology that will save lives and reduce the economic impact of an earthquake by far more than the cost to build this warning system. It simply needs to be properly funded.

Thank you for considering our request.

Sincerely,



Dianne Feinstein  
United States Senator



Maria Cantwell  
United States Senator



Jeffrey A. Merkley  
United States Senator



Kamala D. Harris  
United States Senator



Catherine Cortez Masto  
United States Senator



Ron Wyden  
United States Senator