OPENING STATEMENT

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House Committee on Science, Space, and Technology
Field Hearing: *"Earthquake Mitigation: Reauthorizing the National Earthquake Hazards Reduction Program"*
May 31, 2018

I want to welcome everyone to today's hearing to review the nation's foremost earthquake research and risk mitigation activities under the National Earthquake Hazards Reduction Program. I look forward to our expert panel's assessment of the program's strengths, weaknesses, and challenges and recommendations for improvements.

As an Inland Empire native, I am all too familiar with the damage that can be caused by earthquakes. Just this month, the Riverside area experienced a magnitude 4.5 earthquake followed by two smaller earthquakes. While there were no reports of injuries or damage, it reminds us that we need continued strong support of our federal earthquake risk mitigation activities.

I am proud to recognize Dr. David Oglesby and Dr. Christos Kyriakopoulos of the University of California, Riverside in the audience today from my district. Set up on display at the back of the City Council Chambers is a 3D print of the fault lines in the state of California that UCR produced. We struggle with how to encourage cities and regions in high earthquake risk areas to implement mitigation measures, but I have a feeling these kinds of demonstrations might help. We can't forget the importance of social and behavioral aspects for earthquake risk mitigation. I encourage everyone to take a look at the display at the end of the hearing.

Following devastating earthquakes in Alaska and California in 1964 and 1971, Congress established NEHRP and tasked four agencies - the National Science Foundation, U.S. Geological Survey, the Federal Emergency Management Agency, and the National Institute of Standards and Technology, the lead agency - to reduce the risks to life and property from future earthquakes. The good work of these agencies and their public and private sector partners has advanced the nation's understanding of earthquakes and provided the science that supports seismic design guidelines and standards for resilient buildings that save countless lives.

Unfortunately, economic damages are still very high after extreme natural hazards occur, and it is important to invest in community resilience. Resilient lifelines, such as roadways, pipelines, power lines, and communications infrastructure, can help get communities back up and running sooner after a big earthquake. In fact, the National Institute of Building Sciences' recently

released *National Hazard Mitigation Saves: 2017 Interim Report* found that every for $1 dollar spent on hazard mitigation the nation saves $6 in disaster costs.

Though the west coast is widely known for its earthquake risk, the U.S. seismic hazard maps show that the central and eastern parts of the nation, as well as Puerto Rico and the U.S. Virgin Islands, are also categorized as having a high probability for strong earthquakes. Two hundred years ago, the New Madrid seismic zone in the middle of the country endured three magnitude 7.0 or higher earthquakes. Further, the composition of the earth under these regions allows the impact of an earthquake to be felt at several times the distance as an earthquake on the West Coast.

While several countries in seismic prone areas have had earthquake early warning systems for many years, the U.S. continues to develop and implement pilot programs for a west coast early alert system. I look forward to hearing from the panel about what Congress can do to accelerate, and eventually expand, deployment of this lifesaving technology that can provide seconds to tens of seconds of time to stop surgeries, keep airplanes in the air, and shut down nuclear power plants and other sensitive machinery. I believe it's also important that we better understand the current state of our infrastructure and buildings and how retrofitting can mitigate both the loss of life and the cost of rebuilding after an earthquake.

These issues are so very important to regions across the nation, and I thank the panel for their testimony as this Committee considers legislative priorities for NEHRP authorization.

Thank you and I yield back.