OPENING STATEMENT The Honorable Ben Quayle (R-AZ), Chairman

Subcommittee on Technology and Innovation

Are We Prepared? Assessing Earthquake Risk Reduction in the United States

April 7, 2011

Good morning. I'd like to welcome everyone to today's hearing.

In light of the devastating effects of the recent earthquake and subsequent tsunami that struck off the coast of northern Japan on March 11, many countries are examining their own level of preparedness. The scale of the human tragedy is difficult to comprehend and our thoughts and prayers are with the people of Japan. It is always a challenge to measure how prepared we are for the next unexpected event, and whether our current efforts are adequate.

Although earthquake risks vary across the country, portions of all 50 states are vulnerable to these hazards. Twenty-six urban areas in fourteen different U.S. states face significant seismic risk. My own district in northern Arizona, does not lie on top of a major subduction zone or fear the threat of tsunamis. But I believe today's topic is important for all of us - earthquake catastrophes have the potential not only to destroy lives and buildings, but also to wreak havoc on civil and industrial infrastructure and the national economy.

In Japan, the after effects of the quakes have reduced supplies of water and electricity, hampering their ability to export many manufacturing products and forcing some businesses to slow or stop operation all together. Supply chains for important technology products here in the States have also been interrupted, directly impacting our productivity.

Clearly the consequences of a major earthquake are felt on a global scale. These hazards represent a serious threat to both national security and global commerce. Given our current economic situation, it would be even more painful for the United States to endure a disastrous earthquake, the socioeconomic effects of which would reverberate for decades.

This Committee has supported ongoing work amongst four federal agencies focused on researching and developing techniques to minimize the devastation of earthquakes. This includes improving forecasting, supporting the development of effective hazard reduction measures, engineering disaster-resilient buildings, and furthering our basic understanding of earthquakes and their effects on people and infrastructure. Coordination of these elements is important to deal with hazards, and effective communication between federal, state and local stakeholders is critical.

Much of the federal research and development effort is housed within the National Earthquake Hazard Reduction Program, also known as NEHRP ["KNEE-HURP"]. This program manages the earthquake hazards reduction efforts of the National Institute of Standards and Technology (NIST), the National Science Foundation (NSF), the United States Geological Survey (USGS) and the Federal Emergency Management Agency (FEMA). These agencies have distinct but highly complementary missions. Coordination of these agencies' work provides the public and

private sectors with the necessary scientific and engineering information to prepare for earthquakes, and hopefully reduce their impact. NEHRP was last authorized in 2009. While the House passed reauthorization legislation in the last Congress with bipartisan support, it was not considered by the Senate.

We have an excellent panel of witnesses before us today, who will examine earthquake risk in the United States and review efforts supporting the development of earthquake hazard reduction measures. We will hear perspectives from the director of a federal program created to reduce earthquake hazards, a state geologist, an emergency management professional, and a structural engineer and member of a national advisory committee overseeing earthquake engineering programs. I'd like to extend my appreciation to each of our witnesses for taking the time and effort to appear before us today.

Thanks again to our witnesses for their participation. I look forward to a productive discussion. With that, I now recognize the gentleman from Oregon, Mr. Wu, for his opening statement.