



April 19, 2019

The Honorable Robert M. Hertzberg
State of California State Senate
Capitol Building, Room 313
Sacramento, California 95814

Subject: California SB 254: Resilient Homes Initiative

Dear Senator Hertzberg:

I am writing to you to express AIR's support of California Senate Bill 254 – Resilient Homes Initiative, which calls for investments to mitigate the impacts of catastrophic earthquakes. As the leading firm engaged in developing catastrophe models for the insurance and reinsurance industry, AIR **supports** this bill along with other efforts to reduce losses, improve resilience, and save lives.

For more than 30 years, AIR has been developing models to help our clients, such as the California Earthquake Authority, prepare for and recover from extreme events. Our models incorporate the latest science and engineering, and provide sound, data-driven information for managing risk. AIR's Earthquake Model for the United States has been continually updated since the early 1990s, and AIR scientists and engineers have been engaged with the USGS, PEER, SCEC, and many others during that time.

A consistent theme throughout our work is the benefit of strong building codes and robust mitigation investments. Florida's continued efforts to improve building codes in the wake of Hurricane Andrew provide an excellent example; recent events impacting Florida have demonstrated that homes and businesses constructed to higher standards perform better, resulting in not only reduced losses for insurers but also less disruption and faster recovery in communities. AIR's engineers witness this impact firsthand by participating in damage surveys following major events and reflect those benefits back to insurers and policyholders in the form of reduced risk indications for mitigated structures. AIR is also a contributor to ISO's BCEGS's 2019 National Building Code Assessment Report to measure the benefits of building codes and improved building practices.

The parallel to California's preparedness is clear. As you are no doubt aware, the USGS in 2014 estimated a 93% probability that an M7.0 or greater earthquake would strike California before 2044. AIR estimates that if an M7.9 earthquake were to occur in Los Angeles County—similar to the 2008 Shakeout scenario—\$170 billion in total damage could result. Insurance payouts (including from the CEA) are estimated to cover just 25% of this total, with homeowners, landlords, businesses, lenders, and ultimately taxpayers bearing the majority share of the loss. Mitigating this risk through sound investments is essential to reducing these potential impacts.

The Earthquake Brace and Bolt program is an example of sound mitigation investment. The success of the program thus far—and the risk awareness and momentum it has created—supports the case for additional investment. AIR is among CEA's partners working to quantify the damage reduction this investment would mean and to update the loss models to reflect this investment and provide the most up-

to-date and accurate view of risk. California's leadership will benefit not only the State of California's residents but also citizens of earthquake-prone regions nationwide and around the world.

For these reasons, AIR supports this bill and the investments in mitigation it enables. Thank you for considering AIR's comments on this important legislation.

Sincerely,



Roger Grenier, Ph.D.
Senior Vice President, Global Resilience Practice Leader

