

December 11, 2025

Email: CEA SB254Input@calquake.com

Subject: Responding to Natural Catastrophes – New Models and Approaches

Dear California Earthquake Authority and Policymakers,

The Insurance Institute for Business & Home Safety (IBHS) appreciates the opportunity to offer recommendations for consideration to the California Earthquake Authority (CEA) as it conducts a comprehensive assessment to analyze and develop long-term reforms to address the state's natural catastrophe risks including approaches that mitigate damage and accelerate recovery.

IBHS is a 501(c)(3) organization enabled by the property insurance industry's investment to fund building safety research that leads to real-world solutions for home and business owners, helping to create more resilient communities. We conduct this work from our Research Center, located in Richburg, South Carolina.

Severe weather disrupts lives, displaces families, and drives financial loss. IBHS delivers top-tier science and translates it into action so we can prevent avoidable suffering, strengthen our homes and businesses, inform the insurance industry, and support thriving communities. The perils we study at IBHS are part of the natural world in which we live, but social and economic disasters occur when these perils meet human populations that live or work in harm's way. To break the cycle of destruction, it is essential to address all aspects of the building performance chain: where you build, how you design and construct, and how well you maintain and repair. As a building science institute, IBHS focuses on the ways that weather behaves, what makes homes and businesses vulnerable, and how our buildings can be more resilient. We exist to help ensure that the spaces where people live, learn, work, worship, and gather are safe, stable, and as strong as the best science can equip them to be.

Wildfire is one of the most important perils we study at the IBHS Research Center. Our facility is the only place beside real-world wildfire events that can expose full-size buildings and building components to realistic thermal exposure of flames and embers. Creating a realistic scenario to study building vulnerabilities to wildfire has made IBHS the epicenter of wildfire research over the past decade and has attracted other research organizations to collaborate with IBHS.

Conflagration—the uncontrolled building-to-building fire spread that can occur when wildfires reach into communities—is at the center of our wildfire work. In both experimental research and post-fire investigations, we seek to advance understanding of the factors that most influence conflagration and learn how to reduce the risk of wildfires destroying whole neighborhoods.

Solutions to reduce wildfire risk are known:

• At the property level, a system of critical mitigation actions can meaningfully reduce the risk that a home ignites from embers, with an additional set of actions reducing the risk

that a home ignites from radiant heat or direct flame impingement. These actions underlie IBHS's *Wildfire Prepared Home program*.

• At the neighborhood level, the risk of conflagration can be reduced by a combination of having sufficient separation between homes, breaking the pathways of connective fuels, and building with ignition resistant materials—along with consistent mitigation actions by homeowners within the neighborhood. These actions underlie IBHS's <u>Wildfire Prepared Neighborhood program</u>.

We know that wildfire risk reduction, particularly when it comes to conflagration, is a matter of property level and neighborhood level actions.

Strong public policies can harness this knowledge to support homeowners and communities in reducing their wildfire risk. This includes investments in technical assistance, education, and—in some cases—financial support that empowers homeowners and neighborhoods to take the coordinated, systems-level actions needed for effective mitigation.

Please find linked below three recent reports that detail our science-based understanding from laboratory and field research on how communities can meaningfully reduce their wildfire risks.

2025: The 2025 LA Conflagrations

2025: Vegetation in Zone 0: Amplifying Damage to Structures

2023: WILDLAND FIRE EMBERS AND FLAMES: Home Mitigations That Matter

Thank you for the opportunity to contribute to this critical issue. We welcome opportunities to help further support CEA as it finalizes its report. If you have any questions, please do not hesitate to contact me at mnewman@ibhs.org.

Sincerely,

Michael Newman General Counsel

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Insurance Institute for Business & Home Safety