May 1, 2024

The Honorable Scott Perry Chairman Subcommittee on Economic Development, Public Buildings, and Emergency Management U.S. House of Representatives Washington, D.C. 20515 The Honorable Dina Titus Ranking Member Subcommittee on Economic Development, Public Buildings, and Emergency Management U.S. House of Representatives Washington, D.C. 20515

Dear Chairman Perry and Ranking Member Titus:

As the Subcommittee on Economic Development, Public Buildings, and Emergency Management considers the value of the Federal Emergency Management Agency's (FEMA) mitigation expenditures, we write to call your attention to the well-documented return on investment that the adoption and effective implementation of resilient building codes provides as well as the longstanding bipartisan support that enabled and encouraged FEMA to focus on these activities. The Subcommittee's May 1<sup>st</sup> hearing is particularly timely as it marks the beginning of Building Safety Month, an international public awareness effort to highlight the importance of building safety professionals in ensuring the resilience and safety of our built environment.

Numerous studies confirm that the adoption and implementation of current model building codes is one of the best mitigation strategies for lessening the impacts of natural hazards, including hurricanes and flooding.<sup>1, 2, 3, 4, 5</sup> The National Institute of Building Sciences (NIBS) – a Congressionally chartered building science organization – estimates that building to modern building codes saves \$11 dollars for every \$1 dollar invested through earthquake, flood, and wind mitigation benefits, while retrofitting 2.5 million homes in the wildland urban interface to wildfire codes could provide a nationwide benefit-cost ratio as high as \$8 dollars for every \$1 dollar invested.<sup>6</sup> FEMA projects that if all future construction adhered to current model codes, the nation would avoid more than \$600 billion dollars in cumulative losses from floods, hurricanes, and earthquakes by 2060.<sup>7</sup> Three U.S. Department of Energy National Laboratories recently found that during prolonged weather-induced power outages, coupled with extreme heat or cold, current codes can reduce deaths due to extreme heat by 80% and extreme cold by 30%.<sup>8</sup>

In addition, contemporary research continues to find that modern model building codes have no appreciable implications for housing affordability<sup>9,10,11</sup>—in fact, no peer-reviewed research has found otherwise. One study considering the role of government regulation on home prices found that

<sup>10</sup> NEHRP Consultants Joint Venture, <u>Cost Analyses and Benefit Studies for Earthquake-Resistant Construction in Memphis,</u> <u>Tennessee</u>, NIST GCR 14-917-26 (2013) (adopting stronger codes would add less than 1-percent to the construction while reducing annualized loss—in terms of repair cost, collapse probability, and fatalities—by approximately 50-percent).
<sup>11</sup> Porter, K., <u>Resilience-related building-code changes don't affect affordability</u>, SPA Risk LLC Working Paper Series 2019-01 (2019) (over the nearly 30-year period studied only increased a home's purchase price by around a half a percentage point in earthquake country or in an area affected by riverine flood).

<sup>&</sup>lt;sup>1</sup> Porter, K. *Do Disaster-Resistant Buildings Deliver Climate Benefits?* SPA Risk LLC (2021).

<sup>&</sup>lt;sup>2</sup> FEMA, *Building Codes Save: A Nationwide Study* (Nov. 2020).

<sup>&</sup>lt;sup>3</sup> Corelogic, <u>Can Modern Building Codes Impact Mortgage Delinquency After Hurricanes?</u> (Aug. 2023).

<sup>&</sup>lt;sup>4</sup> Kousky, C., M. Palim, and Y. Pan. *Flood Damage and Mortgage Credit Risk: A Case Study of Hurricane Harvey, Journal of Housing Research v.* 29 (Nov. 2020).

<sup>&</sup>lt;sup>5</sup> Corelogic, <u>What Are the Effects of Natural Hazards on Mortgage Delinquencies?</u> (Nov. 2021).

<sup>&</sup>lt;sup>6</sup> NIBS, Natural Hazard Mitigation Saves: 2018 Interim Report (2019).

<sup>&</sup>lt;sup>7</sup> FEMA, Protecting Communities and Saving Money: *The Case for Adopting Building Codes* (Nov. 2020).

<sup>&</sup>lt;sup>8</sup> DOE, Enhancing Resilience in Buildings Through Energy Efficiency (July 2023).

<sup>&</sup>lt;sup>9</sup> Simmons, K. & Kovacs, P., <u>Real Estate Market Response to Enhanced Building Codes in Moore, OK</u>, Investigative Journal of Risk Reduction (Mar. 2018) (stronger building code had no effect on the price per square foot or home sales).

construction costs – including labor and materials – were flat from 1980 to 2013, a period during which construction codes were widely adopted and updated.<sup>12</sup>

In recognition of their well-documented benefits, FEMA has incentivized and encouraged the use of resilient codes at all levels of government to "increase the resilience of communities after a disaster," "protect lives and property," and to "reduc[e] the need for future Federal disaster recovery funding and other assistance."<sup>13</sup> This approach transcends partisanship; it was significantly advanced during the Trump Administration through FEMA<sup>14</sup> as well as within the Federal government's National Mitigation Investment Strategy— developed by the Mitigation Framework Leadership Group (MitFLG)<sup>15</sup> – and continues today.

FEMA's efforts have similarly, and consistently, received bipartisan support from Congress. The most comprehensive update to FEMA's natural hazards response and recovery authorities, the *Robert T. Stafford Act Disaster Relief and Emergency Assistance Act* (P.L. 93-288, as amended), in the last decade was drafted and advanced by Republican leadership in the U.S. House and Senate. That legislation, the *Disaster Recovery and Reinvestment Act of 2018 (Div. D of P.L. 115-254)*, for the first time authorized FEMA to provide grants pre-disaster to assist communities in adopting, updating, and enforcing resilient building codes.<sup>16</sup> Congress' doing so sensibly expanded FEMA's preexisting post-disaster support for these same activities, which FEMA has supported since the 1990s. These activities principally support the evaluation and mitigation of existing risk to the built environment through experts, community engagement, and training. Recognizing that some jurisdictions have adopted stronger codes than those adopted at the state level, FEMA's Fiscal Year 2023 Building Resilient Infrastructure and Communities (BRIC) grant program incentivizes both state and local adoption and implementation of hazard-resistant codes in making mitigation project awards.

We welcome the Subcommittee's review of FEMA's mitigation leadership and encourage continued bipartisan support for the development, adoption, and effective implementation of resilient building codes and standards.

Sincerely,

AEC Science & Technology, LLC American Concrete Institute American Property Casualty Insurance Association American Society of Civil Engineers American Society of Interior Designers Applied Technology Council ASHRAE

<sup>&</sup>lt;sup>12</sup> Gyourko, J. & Molloy, R., <u>*Regulation and Housing Supply*</u>, Handbook of Regional and Urban Economics, Volume 5B Chapter 19 (2015).

<sup>&</sup>lt;sup>13</sup> FEMA, <u>Consensus-Based Codes, Specifications and Standards for Public Assistance</u>, FEMA Recovery Interim Policy FP- 104-009-11 Version 2.1 (Dec. 2019)

<sup>&</sup>lt;sup>14</sup> Id.

<sup>&</sup>lt;sup>15</sup> U.S. Department of Homeland Security (DHS), Mitigation Framework Leadership Group (MitFLG), <u>National Mitigation</u> <u>Investment Strategy</u> (Aug. 2019).

<sup>&</sup>lt;sup>16</sup> Compare H.R. 4460 (committee-passed), 115th Cong. (2018) (authoring grants "to establish and carry out enforcement activities to implement the latest published editions of relevant consensus-based codes, specifications, and standards that incorporate the latest hazard-resistant designs"), with H.R. 302 (enacted), 115th Cong. (2018) ("to establish <u>and</u> carry out enforcement activities and implement the latest published editions of relevant consensus-based codes, specifications, and standards that incorporate the latest hazard-resistant designs") (clarifying that grants can support both the adoption and enforcement of resilient codes).

Association of State Floodplain Managers **BuildStrong America Concrete Foundations Association** Concrete Reinforcing Steel Institute **Congressional Fire Services Institute** Earthquake Engineering Research Institute **EPDM** Roofing Association Federal Alliance for Safe Homes – FLASH, Inc. Flood Mitigation Industry Association Habitat for Humanity International Institute for Market Transformation Insurance Institute for Business & Home Safety International Association of Fire Chiefs International Association of Fire Fighters International Association of Structural Movers International Code Council International Institute of Building Enclosure Consultants Knauf Insulation National Association of Mutual Insurance Companies National Association of State Energy Officials National Association of State Fire Marshals National Council of Structural Engineers Associations National Environmental Health Association National Fire Protection Association National Ready Mixed Concrete Association National Society of Professional Engineers National Electrical Manufacturers Association Natural Resouces Defense Council North American Insulation Manufacturers Association Polyisocyanurate Insulation Manufacturers Association Portland Cement Association Precast/Prestressed Concrete Institute Reinsurance Association of America Sheet Metal and Air Conditioning Contractors National Association Single Ply Roofing Industry Structural Engineers Association of California Tilt-Up Concrete Association U.S. Green Building Council U.S. Resiliency Council Union of Concerned Scientists