United States House of Representatives
Select Committee on the Climate Crisis

Hearing on October 17, 2019
"Solving the Climate Crisis: Cleaner, Stronger Buildings"

Questions for the Record

Roy Wright
President
Insurance Institute for Business and Home Safety

The Honorable Kathy Castor

1. **IBHS researches and tests building standards, installation practices, and the quality of material found across the country and determines how variations affect the ability of a structure to withstand a variety of hazards. Building codes play an important role in how this type of research is translated in meaningful ways across our communities. Can you help the Committee better understand the role of building codes related to resilient construction practices and how your research can lead to stronger, sustainable, and resilient homes and businesses?**

IBHS strongly supports the statewide adoption of building codes and standards, strong local enforcement of the codes, and training and licensing of building officials, builders and contractors. It is important to understand that building codes were developed first and foremost for the purpose of life safety – that is, to ensure safe electrical wiring and gas lines, basic structural integrity, and to reduce internal fire hazards. However, damage reduction that results from the adoption and enforcement of building codes helps to keep people in their homes and businesses following a natural or man-made disaster, reduces the need for public and private disaster aid, and preserves natural resources and the built environment.

The importance of strong, well-enforced building codes was clearly demonstrated in 2017. Over a two-month period from August through late September, three devastating hurricanes (Harvey, Irma, and Maria) each caused more than $1 billion in damages, and collectively affected 25 million Americans, or almost 8 percent of the U.S. population, according to the Federal Emergency Management Agency (FEMA). Hurricane Irma, in particular, provided a real-world test of the strong statewide building code now in Florida, with homes built to modern Florida building codes faring much better than those built before major code changes were implemented. In other areas of the country, like California, building codes focus on the threat of earthquakes and wildfires. Unfortunately, many states have not prioritized adopting modern codes or allow local jurisdictions to "opt-out" of certain sections of the code. This piecemeal approach among states and jurisdictions can lead to compromised building safety standards, varying enforcement regimes, and unpredictable permitting processes. When entire communities utilize a common set of base rules for construction, it leads to safer buildings and more predicable construction practices. Critical to ensuring building codes function properly is proper enforcement as a building code is

only effective if there is enforcement and inspection to verify that construction is completed according to the code requirements.

Building codes provide benefits beyond keeping people and property safe. Studies have found that investing in stronger building can save the homeowner and taxpayer significantly during a hazard. Recent research shows that improvements to the Florida building code have reduced windstorm losses by up to 72% and that for every $1 of additional construction costs $6 in losses were saved.

While much of IBHS' work focuses on preventing avoidable damage before it occurs, it is equally important to build back better. Congress should demand that communities receiving grant or programmatic assistance for pre-disaster mitigation or those in the recovery process rebuild in smarter, stronger, and sustainable ways. At a minimum, this means states should have a up to date, statewide, and strongly enforced building codes. In areas of the state where known vulnerabilities exist, congressional funds should demand even more advanced building standards.

2. **Can you comment on how energy-efficient and resilient building practices work hand-in-hand?**

Energy efficiency and resilient construction practices can work together to build clean, efficient, and strong homes. One of the most visible examples of the nexus between energy efficiency and resilience is use of an impact resistant window, which can provide protection from flying debris in areas that are vulnerable to winds while simultaneously providing excellent thermal insulation, reducing energy costs and consumption. Similar insulation benefits can be realized with a spray foam sealed roof deck, which have high R-values and can provide an extra water barrier when the roof cover fails.

Perhaps the greatest return on energy efficiency value realized when building strong homes is their long-lasting durability. The vast energy consumed by the manufacturing and transportation of building new homes - and disposal of debris following a storm - can be greatly reduced by taking small steps to prevent avoidable damage.

3. **In your testimony, you discuss two pieces of tax legislation: one for state-run grant programs and the other for home and business owners that undertake mitigation activities. Could you tell us more about these bills and how they would help adaptation?**

First of all, I would like to congratulate Congress for taking bold action last year by advancing two of the most significant pieces of disaster mitigation legislation in decades: The Bipartisan Budget Act of 2018 and the Disaster Recovery Reform Act of 2018. While these laws represent a new era in disaster mitigation policy at the federal level, there are additional steps Congress can take to assist homeowners and small businessowners with disaster preparedness. One idea is to remove the tax penalty for individuals and businesses that benefit from state-based catastrophe-loss mitigation programs.

H.R. 2053 the "Catastrophe-Loss-Mitigation Incentive and Tax Parity Act of 2019" would eliminate tax lability for amounts received as part of certain state-funded grant programs. Several states sponsor these types of successful mitigation programs, including the California Bolt + Brace program for strengthening buildings located in earthquake prone areas, and the Strengthen Alabama Homes program, which

provides grants funds to upgrade to a FORTIFIED Roof. We know it is unsustainable for the federal government to be the sole leaders on mitigation.

Where states are contributing their own funds, it is important for the federal government to recognize and reward those actions, not penalize them. Similarly, on the on the individual side, bipartisan legislation pending in both the House and Senate, known as the SHELTER Act, would provide up to a 25% tax credit for eligible expenses paid by individuals and businesses for purchases that help reduce potential damage from hurricanes, flooding, and other forms of natural disaster. These types of proposals empower and reward states and individuals who take action into their own hands - ultimately contributing to overall community resilience.

4. **Congress has allocated a lot of money to disaster recovery through HUD CDBG-DR. Recently another $6.8 billion was made available for mitigation in several states, including Florida, Texas, California, Georgia, and Louisiana. How can the Federal government ensure that states are using disaster recovery funds to rebuild in ways that reduce risks from future disasters?**

Congress should require communities receiving grant or programmatic assistance for pre-disaster mitigation to rebuild in smarter, stronger, and sustainable ways. At a minimum, this means states should have up-to-date, statewide, and strongly enforced building codes. In areas of the state where known vulnerabilities exist, congressional funds should demand even more advanced building standards. Specifically, Congress should urge the use of the FORTIFIED Home standard when appropriating CDBG-DR or MIT funds for new homes.

Habitat for Humanity created the Habitat Strong program, which mirrors the FORTIFIED Home standards and provides low-to-moderate income families with resilient and affordable housing. Recently, five Habitat Strong homes in Panama City, Florida stood strong against the fierce winds of Hurricane Michael in 2018 - the only reported damage to any of the homes being a single piece of loose siding.

As mentioned above, the IBHS FORTIFIED program has shown its effectiveness with the five Habitat Strong homes in Panama City, Florida. We also saw success of the FORTIFIED building standard in North Carolina following Hurricane Dorian. Hurricane Dorian threatened close to 1,000 FORTIFIED homes in coastal North Carolina in August 2019. Many of these homes were FORTIFIED by grants made available from the North Carolina Insurance Underwriters Association (NCIUA). Dorian had sustained winds that were as high as 90 mph along the barrier islands, including the Outer Banks, where most of North Carolina FORTIFIED designations are located. NCIUA has received just five roof-related claims from their 400+ insureds with FORTIFIED roofs, only two of which reported water intrusion. FORTIFIED Roof kept the water out for 99.5% of homeowners who have invested in a stronger, sealed roof. Federal programs that fund housing should take a cue from this example and ensure taxpayer investments are protected.

We urge Congress to incentivize the adoption and use of higher building standards, such as FORTIFIED Home, when federal funds are at stake.

Wildfire

Recently, IBHS joined ICC to urge FEMA to require the use of the International Wildland Urban Interface Code as a Minimum Standard for disaster loans and grants. Wildfires have destroyed more than 35,000 structures within the past decade. Our comments state, in part, “The wildland urban interface

(WUI) is an area of particular wildfire risk, and one-third of all U.S. homes are now located there. One study found that the WUI has increased from 1990 to 2010, now affecting 43.4 million homes (a 41% increase), and covering 770,000 km (a 33% increase), making it the fastest growing land use type in the conterminous U.S. Yet despite the seriousness of this hazard, FEMA's Policy does not address wildfire resilience." Congress should continue its oversight role of FEMA to ensure these types of policy changes are made at FEMA.

5. **In your testimony, you mentioned Habitat for Humanity and said several of their strong homes did a great job holding up during Hurricane Michael. It's great to hear that programs like this are protecting vulnerable populations – the ones who can least afford to be displaced from their home or job after a disaster. Could you tell us more about the Habitat Strong program? How can the Federal government incentivize more innovative solutions to help vulnerable populations become more resilient?**

The Habitat Strong program was developed by Habitat for Humanity International (HFHI) to provide resources and recommendations for weather-resilient construction to Habitat affiliates across the country, with the goal of reducing damage to homes owned by the families served by Habitat being able to return to their normal lives as quickly as possible after a disaster. One of the primary recommendations to affiliates nationally has been the IBHS FORTIFIED standards. Working with funding partners, including many IBHS member companies, HFHI has been able to provide a number of grants to affiliates for resilience improvements, specifically for FORTIFIED Roof, Silver or Gold designations. There are some affiliates that have not pursued a designation, but have begun implementing the standards, as was the case in the homes that faired so well in Hurricane Michael.

IBHS would recommend that all homes built and all roofs replaced with federal dollars meet the standards set forth in FEMA's Wind Retrofit Guide. At a minimum, we would suggest that HUD encourage its grantees to do this, in the same manner it encourages grantees to build and retrofit to Energy Star standards.

The Honorable Garret Graves

1. **You mention in your testimony the successes seen from programs instituted in Alabama. Was this program directed by any mandate at the federal level?**

There was no federal mandate or federal dollars for the programs instituted in Alabama. The successes here were realized from a multifaceted approach, including a suite of state legislation providing incentives and setting FORTIFIED as the resilience standards for the state, the establishment of a grant program to retrofit existing homes, robust coastal codes and a grassroots education effort that helped to create a culture of resilience and facilitated the widespread adoption of the FORTIFIED program for both new construction and reroofing.