

REAUTHORIZATION OF THE NATIONAL FLOOD INSURANCE PROGRAM PARTS I AND II

HEARING

BEFORE THE

COMMITTEE ON

BANKING, HOUSING, AND URBAN AFFAIRS

UNITED STATES SENATE

ONE HUNDRED SEVENTEENTH CONGRESS

FIRST SESSION

ON

EXAMINING THE REAUTHORIZATION OF THE NATIONAL FLOOD INSURANCE
PROGRAM

MAY 18 AND JUNE 17, 2021

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REAUTHORIZATION OF THE NATIONAL FLOOD INSURANCE PROGRAM—PART I

TUESDAY, MAY 18, 2021

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Committee met at 2:30 p.m., remotely, via Webex, Hon. Sherrod Brown, Chairman of the Committee, presiding.

OPENING STATEMENT OF CHAIRMAN SHERROD BROWN

Chairman BROWN. Good morning. The Senate Banking, Housing, and Urban Affairs Committee will come to order. This hearing is in the virtual format. A few reminders as we begin. Once you start speaking there will be a slight delay before you are displayed on the screen. To minimize background noise, please click the Mute button until it is your turn to speak or ask questions.

There is a box on your screen labeled “Clock.” For witnesses, you will have 5 minutes for your opening statements. For all Senators, the 5-minute clock still applies for questions. With 30 seconds remaining for your statements and questions you will hear a bell ring to remind you your time is almost expired. It rings again 30 seconds later. If there is a tech issue we will move to the next witness or Senator until it is resolved.

To simplify the speaking process, Senator Toomey and I have agreed to go by seniority for this hearing.

This hearing is the beginning of our efforts, bipartisan efforts, to enact a long-term reauthorization of the National Flood Insurance Program. At a later hearing, we will invite the Federal Emergency Management Agency to discuss the status of reauthorization of the program.

Flooding is the most common, most costly natural disaster facing families, businesses, and communities across our country. It can take families’ homes and memories, wreck their finances, shutter a small business, destroy infrastructure, even entire communities. Disasters often fall hardest on low-income families in communities who have fewer resources to prepare for and respond to them.

We can only expect flooding to get worse and become even more common as the climate continues to change. People in Ohio and in North Dakota, Maryland, Louisiana, all over the country, are already seeing more flooding. They are feeling the consequences, whether from spring snow melt or increasingly powerful storms or sunny-day flooding in coastal communities, or extreme rainfall that overwhelms aging infrastructure and the land’s capacity to absorb

water. Just today we are seeing flash flooding in Louisiana and Texas.

No matter where you live, everyone pays for the natural fallout as the country spends tax dollars to help families and communities recover. We know we must take action to protect communities from climate change and seize the opportunities that come with that effort. That is going to be a long-term effort. While we seek to halt the trajectory of our changing climate, we also need to help families and communities become more resilient to the flooding we face now in the coming decades, and, whenever possible, avoid it altogether.

The NFIP is critical to that effort. The program, as we know, provides \$1.3 trillion in coverage to more than 5 million homes and businesses, and some 22,000 communities. It is not just an insurance program. It is not just to help with recovery, but to prevent and minimize the damage in the first place.

The NFIP combats the overall threat of flooding through four interrelated components: flood insurance, to help property owners and renters recover quickly after a flood and reduce the need for Federal emergency spending; floodplain management, to minimize damage to people and property, make our communities more resilient through the adoption of local ordinances and building codes; floodplain mapping, to identify and communicate that risk to first responders, homeowners, and communities so they can mitigate or avoid hazards altogether; and mitigation, to help remove property from harm's way through property-level and community investments that reduce our overall level of flood risk and will save money.

Through NFIP reauthorization, we have an opportunity to make our families and businesses and communities safer and more resilient. Today our witnesses will provide their perspectives on what this Committee should consider as we work on that effort. I am interested, from all you as witnesses, in your recommendations for ways we can strengthen the NFIP so it can provide reliable access to insurance for property owners and renters, so we can address affordability concerns, so we can ensure that more people are aware of their flood risks and ensure against losses. We help the Nation predict and reduce our overall level of flood risk through investments and improvements in mapping, management, floodplain management and mitigation.

In 2017, then-Chairman Crapo and I began working with Members of this Committee on a long-term reauthorization. This Congress I look forward to continuing this work with Ranking Member Toomey and the Members of the Committee to strengthen NFIP and the country's comprehensive approach to mitigation flood risk through a long-term reauthorization bill. That is our goal, and I am hopeful we can do it.

Ranking Member Toomey.

OPENING STATEMENT OF SENATOR PATRICK J. TOOMEY

Senator TOOMEY. Thank you, Mr. Chairman, and greetings to all of our witnesses today. As we know, the last long-term reauthorization of the National Flood Insurance Program occurred in 2012. That 5-year authorization expired, of course, in 2017, and since then we have had 16 short-term NFIP reauthorizations. I am hop-

ing that we can find the common ground necessary to avoid a 17th short-term reauthorization.

However, I would remind my colleagues our deadline of September 30th is closer than it may seem. I am ready to work quickly and cooperatively to find a path forward. But before we discuss what ought to be in the NFIP reauthorization, I do want to remind everyone of the scope of NFIP's challenges. Put simply, NFIP is broken. Since 2005, when Hurricane Katrina devastated the Gulf Coast, NFIP has had to borrow nearly \$40 billion from the Treasury in order to pay claims, and that was not just Hurricane Katrina.

In other words, NFIP has lost about \$2.25 billion per year, on average, over the last 16 years. Now consider that \$2.25 billion per year loss, considered in the context of NFIP's total annual revenue last year of about \$4.6 billion. For the last decade-and-a-half, NFIP has averaged an annual loss representing about half its total annual revenue.

Now in the real world, a private insurer that had this magnitude of losses year after year would certainly cease to exist. And that brings me to an important point. The NFIP really should not be considered an insurance program at all. In many ways, it is really a subsidization program. Specifically, NFIP subsidizes the cost of living and building in flood-prone areas. Usually we subsidize activities because we want to encourage them. Reversely, in the case of NFIP, subsidies lead to more building and rebuilding in areas at extreme risk of flooding. Exacerbating the problem, development itself within these flood-prone areas tends to further increase flood risk and flood damage, because it covers the absorbent green space with impermeable surfaces.

And to whom do these subsidies mostly accrue? Wealthy people. Properties with subsidized NFIP premiums are overwhelmingly located in our wealthiest communities. Likewise, subsidized NFIP premiums are rare in our lower-income communities.

Lately, this Committee has spent a great deal of time discussing climate risk and equity. I cannot think of a better opportunity to demonstrate a commitment to addressing both than through a proper reauthorization of the NFIP.

Now part of the good news is that the NFIP is on a slow but positive path toward actuarially more sound premiums, and that brings me to the key principle of reauthorization, which is let's do no harm. Reauthorization must not interrupt this important positive progress. Next we should continue to explore opportunities to bring more private capital into the flood insurance business. NFIP should continue to pursue opportunities to lay off risk to the private sector through reinsurance and other creative capital market structure.

In the event that NFIP needs additional authority to do so, we should provide that authority. Additionally, we should discharge private flood insurance as an alternative to NFIP. Increasing the availability of private flood insurance is a great way to get more homeowners insured against flood damage. That is a worthwhile goal that is good for the homeowner and the taxpayer.

Further, if the private sector can offer better coverage, better service, and do it at a better price, why would we want to stand

in the way of that service for our constituents? Additionally, to the extent that subsidies continue to exist within NFIP, we should at least explore opportunities to target those more to the people who need them the most. But I would remind my colleagues that the incentives, the perverse incentives involved in flood insurance subsidies, and urge great caution.

Finally, I hope we take this opportunity to find a better way to explain flood risk to policyholders, and perhaps more importantly, future home buyers. Those who choose to live in flood-prone areas should do so with eyes wide open. Flood insurance is important, and it provides considerable financial security, but flood insurance is not the National Guard or the Coast Guard. It cannot rescue people stranded by rising floodwaters. And flood insurance is not a time machine. It cannot give back the days, weeks, months, and in some cases years it takes to rebuild and recover from a major flood.

So, Mr. Chairman, in conclusion, I think a long-term reauthorization must continue to move NFIP in a positive direction, and I stand ready to work with you and my other colleagues to achieve that goal. Thank you.

Chairman BROWN. Thank you, Senator Toomey.

I will introduce today's witnesses. Mr. Chad Berginnis is the Executive Director of the Association of State Floodplain Managers. He previously served in several planning and community support roles in my State, including serving as Ohio State Hazard and Mitigation Officer. He has previously testified before this Committee on the topic of NFIP. He lugs around Ohio State while inexplicably having moved to Wisconsin.

Ms. Velma Smith is the Senior Government Relations Officer at Pew Charitable Trusts, where she has worked in reforming flood insurance and promoting flood-resilient and environmentally sound coastal policy. She previously served as a senior advisor with the National Environmental Trust and Executive Director of Friends of the Earth.

Rebecca Kagan Sternhell is Director of the New York City Office of Federal Affairs, where she has worked on flood insurance issues for almost a decade. She previously served as Deputy Assistant Administrator at the U.S. Small Business Administration, and as Assistant Corporate Counsel in the Division of Legal Counsel in the Mayor's Office of Federal Affairs for New York City's Law Department in Washington.

Mr. Stephen Ellis is the President of Taxpayers for Common Sense. He joined Taxpayers for Common Sense in 1999, where his roles have included serving as media and legislative spokesperson. Mr. Ellis has also previously testified before this Committee on flood insurance.

Mr. R.J. Lehmann is Senior Fellow and Editor-in-Chief at the International Center for Law & Economics. He founded the R Street Institute where he served as Director of Finance, Insurance, and Trade Policy. He also served as Deputy Director of the Heartland Institute's Center on Finance, Insurance, and Real Estate.

Mr. Berginnis, if you would begin.

**STATEMENT OF CHAD BERGINNIS, EXECUTIVE DIRECTOR,
ASSOCIATION OF STATE FLOODPLAIN MANAGERS**

Mr. BERGINNIS. Thank you. Good morning Chairman Brown, Ranking Member Toomey, and Members of the Committee. I am Chad Berginnis, Executive Director of the Association of State Floodplain Managers and am honored to be testifying on a program that our organization and members consider essential to the Nation's flood loss reduction efforts, the National Flood Insurance Program.

Our members are involved in implementing most elements of the NFIP, and ASFPM has provided input on every NFIP reform effort since the 1980s. Our written statement identifies over 20 reform ideas for your consideration.

Today the NFIP is on the cusp of a significant transformation. The premise is simple: use an accurate, risk-based rate to communicate to homeowners, business owners, and renters their true flood risk. That is what Risk Rating 2.0 does. Despite having some implementation questions and concerns, especially regarding how the new system will tie into floodplain management and mitigation elements of the NFIP, we are nonetheless supportive of Risk Rating 2.0.

If we were to identify one of the most significant financial risks to the NFIP, though, we must examine how debt is dealt with. We have seen you give FEMA authority to use private sector financial risk management tools, such as reinsurance and catastrophe bonds. You have put policies on the path to full risk rates, and with Risk Rating 2.0, FEMA will be using current insurance rating approaches.

Yet the NFIP's debt seems to be treated by Congress differently than programs like crop insurance, where the annual taxpayer cost is near \$10 billion. It is time to recognize the progress that FEMA has made with managing the financial risk of the program, recognizing that the NFIP was never designed to handle today's catastrophic flood events and recognize the broader societal benefits of the NFIP by forgiving the debt and establishing a threshold like a sufficiency standard, above which debt is treated, like disaster assistance and appropriated through disaster supplementals.

The foundation on which the entire program is built is comprehensive and complete flood mapping. Arguably, the most significant reform in 2012 was the establishment of the National Flood Mapping Program. It mandated an ambitious national flood mapping effort that comprehensively identified the types of different flood risks facing our citizens.

Sadly, we have to report that since that time, beyond ensuring that the maps were largely updated, we barely made progress on expanding the mapping to ensure we have identified flood hazard areas before development, not afterwards.

In candidly refreshing testimony in early 2020 before the House Science Committee, FEMA not only recognized this shortfall but also indicated that appropriations are not nearly where they need to be. ASFPM is calling for an increased authorization for flood mapping and also asking you to consider a \$7.5 billion flood mapping surge as part of any infrastructure bill that the Senate might consider.

Floodplain management's role in the NFIP is only successful if we enable communities and States to have the capacity to do it. It focuses on adopting and enforcing codes and standards that govern land use and construction in flood hazard areas. Because State and local capability is key to effective floodplain management, ASFPM is calling for the authorization of the Community Assistance Program, doubling its budget from \$10 million to \$20 million annually.

The flood mitigation element of the NFIP is realized primarily through increased cost of compliance coverage as part of every NFIP policy, and the Flood Mitigation Assistance Program, which focuses on mitigating existing at-risk buildings. ASFPM is calling for a much stronger investment, both ICC and FMA, including tripling the amount of ICC funds available through a flood insurance policy. ASFPM also recognizes and supports adding new mitigation tools to the toolbox, including loan programs and more focused flood mitigation planning.

Finally, we have already commented on Risk Rating 2.0, and we also note that the flood insurance element of maintaining availability of NFIP policies is critical, even with the growing private sector market, as private policies will inevitably be dropped after claims in an area due to geographic concentration of risk. ASFPM continues to believe that there are some reforms necessary to ensure that the NFIP is on a fair playing field with private flood before mechanisms like continuous coverage are considered.

In closing, we would also like to comment on how the NFIP can address equity and social justice. One of the strong arguments for Risk Rating 2.0 is that preliminary data from FEMA suggested it will make rates more equitable and just. We also recognize that the NFIP will need a targeted, means-tested affordability program. Mitigation efforts through FMA could be made more just by evaluating how other policies like relocation assistance and benefit-cost analysis can be changed to recognize equity and social dimensions of flooding.

By building the NFIP of tomorrow, we should ensure that all of our communities and property owners have the opportunity to make the families, their homes, and businesses more resilient to the Nation's most significant natural hazard, flooding. Thank you.

Chairman BROWN. Thank you, Mr. Berginnis. Ms. Smith is recognized.

**STATEMENT OF VELMA M. SMITH, SENIOR OFFICER,
GOVERNMENT RELATIONS, THE PEW CHARITABLE TRUSTS**

Ms. SMITH. Thank you. Good morning, Chairman Brown, Ranking Member Toomey, Members of the Committee. On behalf of the Pew Charitable Trusts I thank you for the opportunity to testify.

Let me start with this. The NFIP is essential to the Nation's management of flood risk. While the program needs to be adjusted and reformed, we know that you must carefully consider the impacts of any changes to a program that serves so many flood-weary communities.

In our written testimony we cover a range of topics, from the pressing need for more mapping, particularly in rural areas, to the shortfalls in mitigation. Let me run through a few of the suggestions.

We urge you craft a requirement for flood disclosure, and we are grateful to Committee Members who have endorsed such proposals. Up-front disclosures about flood risk, made before financial commitments and mortgages or leases, can help consumers make flood-smart decisions.

We wholeheartedly endorse the proposal by Senators Reed, Kennedy, and Menendez to establish a flood-specific revolving loan fund. Floods rank, as you have noted, as the most frequently and costly natural disaster, so we believe it makes good sense to create and generously seed a program to help States, territories, and tribes with flood mitigation. A revolving loan fund would address the feast-and-famine problem that can attach to grant awards and allow States to buildup their own staffing and preparedness capability.

We also thank Senator Scott and Schatz for focusing on the long-standing but still growing problem of repetitive loss properties. These are the properties that in some years account for as little as 1 percent of policies but tap the fund for as much 30 percent of claims. Pew believes we must make the neighborhoods that contain these properties top priorities for mitigation.

And, of course, we know you must look at rates and affordability. We support efforts to make premiums more affordable for those least able to maintain coverage. We believe you must do so with a carefully targeted program, one that is truly equitable and will not threaten the program's ability to pay claims. We caution against across-the-board-rate cuts, which will only perpetuate some of the program's current inequities.

We understand the apprehension around Risk Rating 2.0, but urge you not to stand in the way of this important and carefully considered update. We also believe that rate assistance must be accompanied by mitigation assistance. For those who live in high-risk areas, particularly areas where high risk overlaps with high social vulnerability, a simple rate subsidy does not solve the real problem. As storms grow fiercer and rainfall increases, threats to life and property will grow despite the lower cost of insurance. The Nation's resilience gap must be met with substantial new mitigation investment and safer building practices.

Finally, we ask you to examine how the NFIP might be changed to foster better, more informed decisions about future flood risk, perhaps prompting changes to the program's floodplain management regulations and mapping efforts. For 50 years, this program has been based on the notion that flooding can be managed by looking backwards and on the assumption that tomorrow's flood will mirror those of the past. Surely the last decade, or even the last half decade has shown us that that is wrong.

In closing, let me say that Pew looks forward to working with the Committee to support an NFIP that will keep flood insurance available to those who need it, without asking taxpayers to subsidize risky development, that will foster fixes or buyouts of problem properties, and provide assistance to vulnerable communities, that will promote careful consideration of future risk and conservation of the natural resources that can help in flood management, and ultimately make the Nation better prepared for tomorrow's severe storms.

I look forward to working with the Committee and I look forward to your questions. Thank you.

Chairman BROWN. Thank you. Ms. Kagan Sternhell is recognized for 5 minutes.

**STATEMENT OF REBECCA KAGAN STERNHELL, DIRECTOR,
NEW YORK CITY OFFICE OF FEDERAL AFFAIRS**

Ms. STERNHELL. Good morning, Senator Brown, Ranking Member Toomey, and other Members of the Committee. On behalf of the mayor and the 8.6 million New York City residents, I thank you for having me here today to discuss the National Flood Insurance Program and its role in our communities.

The advent of sea level rise and rapid climate change is forcing us to reckon with our relationship to the water and the cities and communities we have developed next to it. Like so many other States and communities throughout this country, New York City's riverbanks and coasts hold a dangerous beauty we must begin to grapple with. Hurricane Sandy laid this fact bare in New York City and communities up and down the Eastern Seaboard, as did Hurricane Irma along the Gulf Coast, and the 2019 Missouri River floods in the Dakotas, Missouri, Iowa, Illinois, Nebraska, and many more. The NFIP is a lifeline for property owners after a flooding event that can mean the difference between recovery and the loss of a critical core asset.

In my written statement I cover a range of reauthorization issues and concerns from the perspective of local governments. Today I want to focus on how we can solve two critical questions. First, how do we make sure flood insurance is affordable to all Americans who need it, and second, what steps should take to mitigate against catastrophic harm stemming from floods?

Flood insurance affordability is already a problem for households across the country, as premiums continue to increase year over year. The challenge of affordability will only continue to grow as climate change increases the intensity and frequency of flooding.

The COVID-19 pandemic has added an additional layer of complexity to the affordability issue, as millions of Americans have lost jobs, saw their incomes reduced, and struggled to pay mortgages and rents. Though we are at the long-awaited moment of this pandemic seemingly coming under control and the country opening back up, millions of Americans will now face staggering rent and mortgage arrears on top of existing mandatory expenses like insurance.

Further complicating matters is the policy FEMA has recently undertaken to reform how rates are calculated, ostensibly to better reflect risk based on a series of public and proprietary tools. Risk Rating 2.0, as it is designed, is expected to cause flood insurance costs to increase in many areas of the country, including New York City's coastal neighborhoods. Many of these neighborhoods are among our last bastions of affordable home ownerships, especially for communities that continue to experience the damaging legacies of racist redlining policies.

Rapidly rising premiums will force thousands to make the impossible choice between abandoning insurance policies or cutting back on household expenses and necessities like food, utility payments,

and school supplies, or even abandoning their homes altogether. This could lead to and trigger a Government-made foreclosure crisis in communities that are already struggling to make ends meet, especially after the COVID-19 pandemic.

Because of all this, the city urges Congress to carefully consider what the future rate structure for the NFIP should be upon reauthorization and what it means for affordability going forward. Congress needs to ensure flood insurance remains affordable for the most vulnerable by establishing a means-tested financial assistance for households that need it most.

Congress can look at metrics, like the RAND-developed PITI ratio, that looks at the cost of owning a home relative to income to help model the program. Rather than blunter metrics like AMI or home value alone, the city believes this type of metric offers an opportunity to set national policy that is sufficiently sensitive to local and individualized conditions, much in the way Risk Rating 2.0 is attempting to be more individualized.

Of course, we cannot solve the affordability problem without also addressing mitigation measures, which serve to buy down risk for the property owner and the program. Currently, the NFIP provides few incentives for property owners to protect their buildings from flood damage and reduce their premiums other than by elevating their buildings. Past efforts at pushing FEMA to identify mitigation alternatives to elevation have yielded limited results.

The city believes more needs to be done and supports provisions on alternative mitigation strategies, especially for dense urban areas, and community-level mitigation is also a critical part of lowering program costs and achieving greater affordability at scale. Federal mitigation programs like BRIC should be maximally funded, whether through a large infrastructure plan or simply through annual appropriations, to increase the resiliency of American communities against the impacts of climate change.

Funding should be allocated for coastal and riverine flooding prevention infrastructure and for interior drainage system upgrades. And Federal support of resilient design must go hand-in-hand with these investments. Federal-local policies that anticipate future risks in new construction and infrastructure should become the national norm. For example, in New York City, we have climate resiliency design guidelines that provide an even higher standard of flood protection for city capital projects. We use sea level rise predictions and maps of future flood risks to calculate building-specific resilient design criteria, in addition to abiding by building codes.

The city urges you to act decisively to safeguard our economy and our communities by ensuring that Americans can affordably protect their homes and businesses from the risks of disastrous floods, now and in the future.

I thank you again for having me here today, and I look forward to your questions.

Chairman BROWN. Thank you. Mr. Ellis, you are recognized for 5 minutes.

**STATEMENT OF STEPHEN ELLIS, PRESIDENT, TAXPAYERS FOR
COMMON SENSE**

Mr. ELLIS. Thank you. Good morning, Chairman Brown, Ranking Member Toomey, Members of the Banking Committee. I am Steve Ellis, President of Taxpayers for Common Sense, a national, non-partisan budget watchdog. Thank you for inviting me to testify at this hearing on reauthorizing the National Flood Insurance Program. TCS has worked on flood- and disaster-related issues on behalf of taxpayers for our entire 26 years of existence, and I have been involved in flood issues dating back to my days as a young Coast Guard officer dealing with the aftermath of the Great Midwest Flood of 1993. These are critical issues for taxpayers, and the country needs smart public policy that protects people and property.

It is worth noting that the first named storm of the 2020 Atlantic hurricane season appeared on May 16th and continued with 30 named storms, a record. This was on the heels of increasing billion-dollar disasters annually. The Congressional Budget Office estimates that hurricane winds and storm-related damages cost the U.S. economy \$54 billion annual, including \$34 billion in annual economic losses to the residential sector. The expected annual cost to taxpayers is estimated to be \$17 billion.

For 50 years, the Flood Insurance Program has helped fuel a development boom in medium- and high-risk areas simply by making it more affordable to take on flood risk. And housing does not occur in a vacuum. As areas develop, infrastructure follows, with roads, bridges, water, electric, and sewer. These all intensify along with residential development. The NFIP has exacerbated exposure to climate change. At the same time, it is negatively impacted by it. As storms increase in frequency, as sea levels rise, this increases the costs to the program. It also increases the demand for disaster spending.

Before Hurricane Katrina in 2005, the Federal Flood Insurance Program never borrowed more than \$1.5 billion from the U.S. Treasury. Since the 2005 storms, the program has borrowed nearly \$40 billion.

NFIP has subsidized rates in the program virtually since its inception, regardless of need. FEMA estimates that more than 25 percent of the properties in the program pay subsidized or grandfathered rates, where the flood zone designation has changed. Even with the properties that are paying supposedly risk-based premiums, the fact that the program can borrow from the Treasury is a built-in subsidy.

The Government Accountability Office has documented large cross-subsidies, many of which benefit high-income homeowners. They found that over 78 percent of subsidized properties in the NFIP are located in counties with the highest home values, while only 5 percent of subsidized properties are in the counties with the lowest home values. This represents a real challenge to the program's sustainability. To help address this, grandfathering should not be allowed for any new construction in the floodplain.

The best way to reduce the rate, for property owners and taxpayers, is to reduce the risk, not with artificial rate caps that hide the real risk to people but about finding ways to fund mitigation,

either at the property or community level. While it varies by situation and peril, we know that every dollar spent on mitigation can save as much as six dollars or more in post-disaster response.

Disasters also have a disproportionate impact on poor and minority populations. In many cases, these individuals do not have the savings to rely on while they rebuild, they may have lost their transportation to work, and their place of business may be destroyed as well. Because of historically discriminatory policies or a need for lower housing costs, these individuals are often situated in less desirable, more vulnerable, higher-risk areas. They may not be able to repay loans made available after disasters or provide sufficient funds of their own to tap Federal programs.

We have long called for means-tested premium assistance to help more homeowners obtain flood insurance while shifting the program away from property-based subsidies. There are a little more than 5 million NFIP policies, but there are well over 100 million housing units in this country. To put the need for flood insurance in perspective, according to FEMA, after 2016's extraordinary heavy rainfall event in Baton Rouge, Louisiana, the average homeowner with flood insurance got \$86,500 to rebuild their home. The average person without flood insurance got only \$9,100 in individual disaster assistance. This sadly demonstrates that many people who are not required to buy flood insurance should. And even with protection from levees, floodwalls, or dams, there is a residual risk of flooding.

FEMA has launched Risk Rating 2.0 to better price actual risk for properties. It is supposed to start with new properties and policies in October and existing policies next year. FEMA worked with a variety of organizations to incorporate more data and flood variables to determine actual risk to properties, and it will be updated annually. In theory, this will reduce some of the cross-subsidies that have plagued the program.

This move to Risk Rating 2.0 coincides with long overdue mapping efforts. It goes without saying there have been enormous technological advancements in mapping and modeling since the program's inception 50 years ago. More advanced technologies such as LiDAR, 3D mapping, and computing power enable much more accurate and predictive maps than we have seen today.

In conclusion, I want to thank you for inviting me to testify today. NFIP and related disasters are critical issues, not just for their budget and taxpayer impacts but for society as a whole. The goal must be to develop risk management and mitigation strategies that enable communities, infrastructure, and industries to become more resilient, face less risk, and can better adapt and mitigate future costs and damages of climate change.

Thank you very much.

Chairman BROWN. Thank you. Mr. Lehmann is recognized for 5 minutes.

STATEMENT OF R.J. LEHMANN, SENIOR FELLOW AND EDITOR-IN-CHIEF, INTERNATIONAL CENTER FOR LAW & ECONOMICS

Mr. LEHMANN. Thank you, Chairman Brown, Ranking Member Toomey, and Members of the Committee. I am R.J. Lehmann, and

I am a Senior Fellow and Editor-in-Chief of the International Center for Law & Economics.

I am speaking to you from St. Petersburg, Florida, and Florida is a strong case study in how the NFIP has transformed America. At the beginning of World War II, Florida was the least-populated State in the South. It is now the third most populated State in the Nation. That is not solely because of the NFIP—air conditioning also played a part—but the NFIP has been the catalyst in the mass movement of population. It has allowed us to convert wetlands and barrier islands, the natural defenses against things like tropical storms and flooding, into millions of acres of flood-prone housing. In the 40 years after the NFIP was created there was a 45 percent increase in the number of Americans living in coastal counties.

The problem, of course, is that thanks to climate change we are projected to see three to six feet of sea level rise by the end of this century. Given current population trends, a sea level rise of three to six feet means that between 4 and 13 million properties will be inundated, not just periodic flooding or chronic flooding, permanently underwater. That is on top of the other flood-related impacts of climate change, like more frequent and more severe tropical storms, more frequent and more severe precipitation events, and it is on top of what human development itself contributes to the problem. When you pave over permeable land, it cannot drain. The more properties that are hooked up to antiquated sewage and drainage systems, the greater the odds of catastrophic failure.

Models show that what are now considered 100-year storms in the Southeast and the Gulf Coast will, by the end of this century, occur ever 1 to 30 years. What are considered 100-year storms in the Northeast and Mid-Atlantic will be expected every year. So when we talk about the NFIP and its debt and the problems with its structure, we need to keep in mind this context that all of this is going to get so much worse.

Yet we are not treating it like a crisis. We continue to build more in flood-prone areas than outside of them. According to FEMA and census data from 2000 to 2016, the population of the 100-year floodplain grew by 14 percent, faster than the rest of the country combined. A 2019 report looked at construction since 2010 in areas that, by the end of the century, will be 10-year floodplains. That is an order of magnitude greater than the 100-year floodplain. In eight coastal States there was more development in that 10-year floodplain than outside of it, and in four of them it is twice as fast. In Connecticut, it was three times as fast.

So how do we address this? Obviously, the NFIP is only part of the problem and can only be part of the solution. I think it is inevitable, in at least some locations, that we would consider pulling back from the coast and moving Americans to higher ground. FEMA's buyout program, some of them within the scope of the NFIP, are one tool to accomplish that, but it will be very difficult for them to match the scale of the problem.

I propose two policies, a carrot and a stick that I think could help nudge us in the right direction. The first is to stop making the problem worse. New construction in 100-year floodplains should not be eligible for NFIP coverage. The guaranteed issue of new policies is where the program most clearly incentivizes building where it is

risky. So that is the stick. We have precedent for this sort of approach with the Coastal Barrier Resources System, USDA's sodbuster and swampbuster programs, and in my State of Florida, the State-run Citizens Insurance no longer insures new construction on the coast.

But importantly, making this shift does not affect existing NFIP policyholders, which I think is a big plus. But it is not enough just to tell people where they cannot build. You also have to provide somewhere where they can. People need to live somewhere. If we are going to see 13 million flood refugees by the end of this century, then we have to make sure that build environment is able to absorb them. We struggle today, in large part because of stringent land use policies, even to keep up with the current housing demand. So this can't wait.

So my second proposal, the carrot, is provide incentives for States to make it easier to build in areas of low risk. What I have in mind is a version of what is called the "disaster deductible" under the Stafford Act. After a disaster, the Federal Government picks up 75 percent of the cost of recovery, States pick up the other 25 percent. I propose a sliding scale so that if a State decides that property owners in less risky areas can build accessory dwelling units, and if they abolish single-family zoning in the 500-year floodplain, the least risky, then instead of having the State pick up a 25 percent Stafford Act cost-share, maybe they have a 20 percent cost-share or a 15 percent cost-share.

What I am proposing, obviously, does not solve climate change, and I know it is partly outside this Committee's jurisdiction, but I think the two policies pair well together. For half a century, the Flood Insurance Program has helped to draw people to risky areas. This would be a nudge to begin to reverse that process, to remove the incentives to build where it is risky and provide incentives to build where it is safe.

With that I am available for your questions.

Chairman BROWN. Thank you, and all five of you, thanks for your thoughtful approach you all have laid out from different perspectives, with the problem, I think, in a really acute way that Senator Toomey and I know we have work to do to figure out how we can move forward on this.

Ms. Smith, let me start with you. Too often after disasters we hear news stories of families saying they did not know their homes had been flooded before they bought them or signed a lease. You have called for flood risk disclosure to prospective homeowners or renters, similar to the lead paint disclosures that took a while, that finally Government has done in most places.

So talk to me about what are the consequences if we do not do that? What will this information, what kind of impact will it have on families and on properties?

Ms. SMITH. Mr. Chairman, I lost audio for a minute. I presume you are asking me that question?

Chairman BROWN. Yeah. What happens with this information? You have called for this information. What impact it would have?

Ms. SMITH. Yes. I think there are so many instances that we have heard story after story of folks who moved into a place and really had no notion that they were buying into an area that had

previously flooded. The neighbors in that community often knew, but those people did not realize what was happening. And they turn around and find out that their finances are strained, they cannot recover. It is renters. There are many instances of apartment buildings where people rent an apartment and then have to be rescued and lose all their belongings.

So we think that if we can add more information, people can make smarter decisions. It is not just about whether they are in a flood zone but whether the building they are going into has ever flooded before.

Chairman BROWN. And a follow-up question to you and Mr. Berginnis about mapping and risk identification. Knowing where it might flood is key to being able to mitigate these risks or avoid them altogether. What are your recommendations for improving FEMA's mapping efforts? Every time we do another reauthorization, as Senator Toomey talked about, we talk about mapping, how important mapping is. We never fund. We authorize it and we never fund mapping as well as we should.

How important is it that FEMA provide projections of future flood conditions? Mr. Berginnis, you go first and then Ms. Smith, if you would.

Mr. BERGINNIS. Well, I suppose on a positive note, you know, back when we were testifying in 2004, we were talking about the quality of existing maps, and one of the things that FEMA has done quite successfully is improve the quality of the existing inventory.

But here is the reality. We have 3.5 million miles of streams, rivers, and coastlines in the country. We have mapped about 1.2 million miles of those. The new development that a lot of the panels talked about typically occurs in an area that does not have existing development, and the problem is if we are developing along these creeks and rivers and areas that we do not know the flood risk, we are already behind. And then the map gets put on and people get all mad because FEMA has put the floodplain on them, and we are doing this backwards.

The most impactful thing is to get the job done mapping the Nation, and also include what future flood risk is going to be, because then local codes and standards can be adopted to make sure that that house is resilient to flooding 100 years down the road, based on its useful life, as opposed to building to today's flood risk standard.

Ms. SMITH. I absolutely agree with Mr. Berginnis that we have to finish the job in the communities that do not have flood maps or have very old flood maps. Those people have to be given a better idea of what their risk really looks like and where it is headed. If they understand existing flood risk, understand what is driving the risk in their area, whether it is development, whether it is sea level rise, whether it is filling of wetlands, then they can work to manage that risk. But if they do not have a notion, then they will just be coming back for disaster assistance and insurance subsidies in the future.

Chairman BROWN. —floodplains are wealthy people, which is true, but it is also a place where—I mean, I remember growing up, the places that were flooded in Mansfield, Ohio, were mostly Afri-

can American, mostly poor people in the White Appalachian section of town too.

So what do we do to make sure under-resourced—and Kagan Sternhell, you can weigh in on this too—tell me, what do we do to make sure under-resourced communities and communities of color can access grants that will keep their communities safe?

Mr. Berginnis, be brief if you would, and then Ms. Kagan Sternhell.

Mr. BERGINNIS. I think two characteristics we know in communities that are problematic with grants. One is to find cost-share, and the second is just have the technical expertise to actually prepare the grants.

So two things that I think need to be changed is working with the cost-share formula to recognize, I believe, kind of equity and even environmental justice kind of factors. And then, second, we have got to provide better capacity, either building it with the community or providing assistance to actually get grant applications built.

Chairman BROWN. Thank you. Ms. Kagan Sternhell, please.

Ms. STERNHELL. So, briefly, I wholeheartedly agree. Especially one of the things we also need to look at is the cost-benefit issue, because often we have low-income neighborhoods, property values are low. Sometimes projects do not cost out, and therefore they are not eligible for a FEMA program like BRIC. So including those social factors are very, very important.

I would say also working to make sure, beyond just getting applications or technical expertise, working at the individual homeowner level, and as I testified to a bit earlier, alternative mitigation measures, because sometimes what works like going up does not really work in a lot of neighborhoods, certainly where it is densely packed, older cities, maybe construction was not as strong as it was previously, you need something other than lifting a home.

Chairman BROWN. Thank you. Senator Toomey is recognized for 5 minutes.

Senator TOOMEY. Thank you, Mr. Chairman. My first question is about moral hazard. You know, this is an intrinsic problem with many kinds of insurance products, and flood insurance is no exception. When homeowners and communities are protected from the financial loss of flooding, all else being equal they have less of an incentive to manage and mitigate that risk. Consider repetitive loss and severe repetitive loss properties, which are properties which have repeatedly flooded and repeatedly been rebuilt by NFIP money over the years. These properties have had approximately \$17 billion in NFIP claims over the years. So when I look at these numbers I worry that NFIP, in its current form, is not appropriately managing moral hazard.

So Mr. Ellis and Mr. Lehmann, would you just briefly address, do you think that historically the NFIP has the right incentive structure to manage moral hazard, or should we do something differently?

Mr. ELLIS. Thank you, Senator Toomey. Certainly I think it is pretty clear that it has not had the right incentive structure to deal with moral hazard. In my testimony I documented how the subsidies disproportionately go to more wealthy communities and do

not go to less-wealthy counties. When you look at the numbers, when I talked about that only 5 percent of the subsidies go to the lower-wealthy counties, it was the bottom 5 deciles. So it was not just like the bottom decile. It was actually really disproportionately balanced toward that side.

So we have disincentivized homeowners from mitigating the risks, and many times hidden their risk from them because they do not actually know what their rate would be, absent the subsidies. And so we are actually hiding the ball.

And I certainly support what Velma was talking about, what Ms. Smith was talking about, in that making sure people know their risk in these areas, and I think that is important risk communication. But certainly the rate structure as well has done a disservice to homeowners and it has done a disservice to taxpayers.

Mr. LEHMANN. Yeah, and I would add not only do the subsidies flow from lower- to higher-risk policyholders, but they flow from inland to the coast. So riverine flooding is a serious problem in many communities, but if you eliminated the coastal counties, the NFIP would actually be profitable. CBO has shown that. So that is specifically how it breaks down. Lower-risk policyholders, many of them pay some flood risk because of riverine flooding, are subsidizing coastal policyholders, and that is a big part of why it the income works the way it does. And I say this as someone who lives in a coastal county. But it is something that is relevant.

Senator TOOMEY. So just to follow up on that, so are you saying that across the Nation, as a whole, on average, the inland plans actually are actuarially sound?

Mr. LEHMANN. More than actuarially sound. They are being overcharged, because they need to subsidize the far below risk cost personal properties, which, you know, if we, as a country, want to make the decision that we want to help people who live in coastal communities, that is a perfectly find decision for Congress to make. But I would think the taxpayers are the people who should support that and not lower-risk policyholders within the NFIP. That only discourages them from buying the protection that they need [inaudible] charge.

Senator TOOMEY. And maybe it should be an explicit understanding or arrangement rather than implicit and kind of hidden in the premium structure.

Let me ask a little bit about Risk Rating 2.0. So FEMA has been working to update its flood risk rating system. That is what Risk Rating 2.0 is meant to do, as I understand it. And it is going to rely on more granular data, setting flood insurance premiums presumably more accurately, using geography and flooding frequency and flooding types and building characteristics, and other sources of information that presumably get us a more accurate risk rating.

So, again, for Mr. Ellis and Mr. Lehmann, is it your view that Risk Rating 2.0 is a positive, constructive development for NFIP and its stakeholders?

Mr. ELLIS. Absolutely, Senator Toomey. I think that it is more information, it is more data. It is taking away a mapping system—well, not taking away a mapping system but updating a mapping system that is 50 years old, that is essentially going to target it at

a property level rather than a broad swath of a neighborhood or a zone.

Mr. LEHMANN. And it helps move the discussion to data and science and away from what are local politics, in many cases. It is contentious to adopt community flood maps—I am sure Mr. Berginnis can speak to that—where everyone does not want to be put in the mandatory purchase zone, which is unfortunate because we should want everyone to have flood insurance. If you are low risk you get charged less, but everyone should have this protection.

Senator TOOMEY. Great. Thank you. Thank you, Mr. Chairman.

Chairman BROWN. Thank you, Senator Toomey. Senator Reed from Rhode Island is recognized for 5 minutes.

Senator REED. Mr. Chairman? Mr. Chairman?

Chairman BROWN. We can see you and hear you, Jack.

Senator REED. OK. Then let me begin my questioning. There is a little bit of disruption through the technology.

First, Ms. Smith, thank you very much for your testimony, and with respect to the State Flood Mitigation Revolving Loan Fund Act, which I have been pursuing for several years. I think providing low- and moderate-income individuals with funds to mitigate flood risk would be a positive.

Could you just elaborate on the benefits of [inaudible]?

Mr. Chairman, I am sorry. I cannot hear anything. Technology just—

Ms. SMITH. Senator Reed—

Chairman BROWN. If Ms. Smith knows the question she can do the answer. She seems a bit eager here. So why don't you go ahead, Ms. Smith, and then Jack, you can go back then.

Ms. SMITH. Senator Reed, I apologize. My audio was going in and out. But we are very supportive of the notion of setting up a revolving loan fund to bring some stability to the funding levels. We have heard over and over again from communities that they cannot sustain keeping mitigation experts on staff and planning ahead for the mitigation projects that they need, because the funding goes up and down. It is feast and famine.

So your proposal would stabilize funding, would allow States to put money on the table and help leverage this, and would really be transformational, I think, in terms of promoting new mitigation projects.

Senator REED. Thank you very much. I have another question, Mr. Chairman, although my machine is not cooperating. But Mr. Berginnis, can you comment on FEMA's efforts doing flood mapping across the country, and also, should these map products [inaudible]?

Mr. BERGINNIS. OK. I caught the—

Chairman BROWN. Mr. Berginnis, did you get enough of that question?

Mr. BERGINNIS. Well, the detail I did not get.

Senator REED. Mr. Chairman, I think the order of the community, I should get off and let other people who have better connections ask questions. I am not usually this inarticulate.

Chairman BROWN. Well, now you are fine. Go ahead and ask the question for Mr. Berginnis.

Senator REED. Chaos. It is chaos. But I will defer to my colleagues, and excuse me for the technical difficulties.

Chairman BROWN. OK.

Senator REED. I will defer.

Chairman BROWN. All right that is fine. Thank you, Senator Reed. Senator Rounds from South Dakota is recognized.

Senator ROUNDS. Thank you, Mr. Chairman. Even though I am in Washington, DC, right now, I think our bandwidth in South Dakota is better than what Senator Reed had here in DC for the last few minutes.

Let me just begin by saying that I really do believe that we have to have a good, solid National Flood Insurance Program in place, and I believe that because the real estate market is critical. Long-term, if we want stability in that market there has to be an alternative. And just as I see private insurance being available, and I think that is going to be a real challenge to get, I think that we do have to have a strong NFIP program. But I like the idea of the write-your-own product.

And I would like to begin by talking a little bit about what happened with regard to Hurricane Sandy and what that has done in terms of driving the discussion today. And I would like to ask Rebecca, just in terms of what happened that caused the problems on Sandy, with regard to the consumers that were there, the folks that had purchased policies and so forth. What were the challenges on Sandy that really drives a lot of the agitation, the irritation, and the disappointment with the NFIP product that was available at that time?

Ms. STERNHELL. Well, I think, first and foremost, the city had not new, and still does not have new final firm flood insurance rate maps since 1983. So when we finally get our final maps, coming in 2024, anticipated from FEMA, it will be 41 years. So, you know, floodwater does not abide by what the flood map says to begin with, but then during Sandy there was far greater inland flooding than had been anticipated, and anyone was aware of.

So there were many people who should have had coverage that did not. There were many people who did have coverage and then were died claims, based on statements that it was earth movement or what have you. But within the write-your-own program, specifically, there were a number of instances where adjusters came out, filed reports. Those reports were subsequently doctored before they were submitted to FEMA, or adjuster reports were submitted without ever a site visit to the property.

So there was a good amount of fraud and a good amount of homeowners being unaware of what was being claimed on their behalf, or even getting an accurate reporting of the damage that was sustained, in addition to claims also being denied.

So that was sort of the genesis behind the reform push certainly in the claims sector, and then with the write-your-owns as well, trying to ensure that there is a higher standard and a higher level of responsibility in the claims process, especially when someone is so vulnerable after sustaining a loss.

Senator ROUNDS. And I appreciate that, because I think this goes to the heart of some of the challenges we have here, and yet I do not understand why this would occur, because as I understand it,

the write-your-owns do not handle the underwriting losses themselves. That goes directly back into the programs.

So why would someone try to manipulate or to change a claim, or as you have indicated, doctor a report? What was the basis for that happening?

Ms. STERNHELL. I think we have seen, starting with Katrina and then with Sandy as sort of the next big hurricane claims, just with national attention, is sort of a swing one direction, where the claims during Katrina, people were paid out large claims, large sums of money. And upon review, and after, in fact, reconciling all that, it turns out people should not have been maybe reimbursed quite so much. And then the insurers and others were required to recoup those overpayments.

And so with Sandy you saw this pendulum swing the other way, where they were trying to avoid having to deal with that recoupment issue. And so it is now a question about how we can better calibrate to get to a point where people are not being overpaid or overcompensated for their losses, but being compensated appropriately, and at the same time not being shortchanged what they are due under the various Federal programs and policies available to them.

Senator ROUNDS. You know, in my prior life I sold insurance, and one of the challenges—smoke losses is one thing, water losses is another thing that is really difficult and challenging to appropriately handle or to do the adjustment on. And I think that any time you bring the third parties in to actually write their policies, put their company's name on them, they really want to do it correctly. And I think it is an excellent program in terms of keeping it simple and easy to do, and to bring more people into the process.

But I would like to ask Mr. Ellis, Mr. Ellis, do you see the write-your-own as a feasible long-term alternative, or at least a part of the National Flood Program in the future?

Mr. ELLIS. Certainly, Senator Rounds. Thank you for the question. I do see that it will be a part of it. It is an element to expand it. But I also think the alternative of private insurance is something that should be promoted and developed, and certainly because one of the issues that you bring up is that if you have a problem with a write-your-own coverage you have got to go to FEMA to argue about this. If you have a private insurer, you go to your State insurance commissioner, which is a lot closer to the consumer and has a lot more skin in the game as far as regulating that exact insurer, and that insurer wants to behave for this insurance commissioner.

Senator ROUNDS. Thank you. And, Mr. Chairman, thank you for the time. I know I am over a little bit. I would just make the comment, I think part of the long-term plan on this should be to allow that State insurance commissioner—because I agree totally with Mr. Ellis. I think that State insurance commissioners, if they had some oversight over the National Flood Insurance plan, I think we might find a lot of these problems being handled.

But thank you, Mr. Chairman. I am over my time.

Chairman BROWN. Thank you, Senator Rounds. Senator Menendez from New Jersey is recognized for 5 minutes.

Senator MENENDEZ. Well, thank you, Mr. Chairman. I think everyone on the Committee can agree that we need to put an end to the short-term reauthorization extensions, I should say, of the NFIP, and finally pass a long-term reauthorization of the program. In my mind, any NFIP authorization bill needs to keep premiums affordable and invest in robust mitigation and fix the claims process that left so many New Jerseyans, for example, out of their homes for years after Hurricane Sandy.

And I also think we need to deal with the NFIP debt so that we can put the program on sound financial footing and reinvest those savings into building resiliently so that communities are prepared for their climate challenges of the 21st century.

Last Congress I introduced a bipartisan NFIP re-auth that answers these challenges. I certainly appreciate Senators Cassidy, Schumer, Kennedy, and other cosponsors on the Committee who came together to advance bold and necessary reforms, and I am hopeful that we can come together. I know Senator Rounds has expressed interest on working on this. I look forward to working with him and others to get a long-term reauthorization done.

But unfortunately, what I have heard from some of the witnesses today concerns me and runs counterintuitive to the whole purpose of the NFIP. The great solution, as some say, to the problems is to raise premiums. Now that makes the most vulnerable to flooding pay extremely high premiums for their coverage. The reality is, the more you put onto the back of the policyholder, the most people leave the program altogether. Ultimately, this idea is worse off for taxpayers, forcing Congress to spend more on expensive disaster relief that goes to unprotected homes.

So I think we know that there are two sides to a budget. You either increase revenues or you cut costs. So why would we penalize policyholders when there are runaway expenses of the NFIP? I mean, 30 cents every premium dollar written goes straight to the pockets of insurance companies. The Federal Government pays itself \$400 million every year in interest payments. FEMA even covers insurance companies' high-priced lawyers that rack up endless legal bills to challenge, I think very often from my experience in Sandy, unfairly, policyholders.

So, Ms. Sternhell, wouldn't you agree that we should get the costs of the program under control, like cutting WYO compensation instead of jacking up premiums that push people out?

Ms. STERNHELL. That is a good question, Senator, and as I laid out in some of my testimony, yes. Write-your-own compensation is something we are concerned about, given the financial situation of the NFIP. Obviously, we want people to be paid fairly for work done, and so one of the things that we have put forward, as perhaps the year one that you issue a policy, a WYO can receive 30 percent of the premium cost.

But when you are basically forwarding a DocuSign for a renewal, that is not the same degree of work. At that point there is an opportunity for the NFIP to recoup more of that premium back to them.

Senator MENENDEZ. Well, I think one of the long-term reauthorization goals has to be keeping premiums affordable.

Now FEMA has been working for the last few years on a new ratings system called Risk Rating 2.0. However, to date there is still very little known about the new rating system, how much premiums will increase, where the impacts will be concentrated, how they went about their rating. And it is not just a New Jersey problem. This rating system will impacted colleagues in the Gulf Coast and southeastern coastal States, among others.

Under the existing rate cap, homeowners can see their premiums double in just 4 short years. This is why I have called for a 9 percent rate cap to protect policyholders from a sudden increase.

Let me ask you again, Ms. Sternhell. Can you talk about why it is important for flood insurance premiums to remain affordable?

Ms. STERNHELL. At the end of the day we want people to be covered, and we want them to be able to rebound after an event. And so ensuring affordability means people will take up coverage. It means that homeowners who maybe are not required to have that insurance coverage will adopt policies, will subscribe. It broadens the pool of risk. It lowers rates for everyone. It lowers the risks to the program overall.

That is some of our concern about Risk Rating 2.0, that it has been done a bit in a black box, and we do not know what the impacts will be, whether they are localized, whether they are widespread in specific communities. And so ensuring affordability I think is the number one challenge facing you all right now as you reauthorize this program.

Senator MENENDEZ. OK. And finally for every dollar spent on mitigation, the Federal Government saves \$6 on the back end. Mr. Berginnis, can you talk about why mitigation is a critical part to reforming NFIP?

Mr. BERGINNIS. Absolutely. Usually the buildings that are being mitigated tend to be our older buildings. They tend to also be lower-cost buildings, and housing folks that are of more modest means, and those that are most vulnerable. So mitigation becomes very important because then whether you elevate, whether you relocate, whether you buy out, and do those kinds of things, you truly can make those families and those businesses much more resilient to flooding in the future, and have the benefit of a lower flood insurance rate.

Senator MENENDEZ. As well as stopping the likelihood of repetitive loss.

Mr. BERGINNIS. Exactly.

Senator MENENDEZ. Thank you, Mr. Chairman. I appreciate your hearing on this.

Chairman BROWN. Thank you. Senator Tillis from North Carolina is recognized for 5 minutes.

Senator TILLIS. Thank you, Mr. Chairman. Just following up on Senator Menendez's comment. I think that we have seen far too many instances down in North Carolina when a homeowner is willing to accept a buyout having no choice but to rebuild, only to be in the same position a year or two down the road. So I think quick resolution is something that we should focus on.

Mr. Ellis and Mr. Lehmann, if you look at a map of the East Coast of the United States you know that North Carolina juts out there and is prone to hurricanes that can hit the Outer Banks or

go down south to Emerald Isle. And we know too many hurricanes, even in my tenure as Senator.

The one question that I have, and I want to get to Risk Rating 2.0, and maybe you can just answer it, do you think the Risk Rating 2.0, that they are comprehensive in nature? One of the things I am particularly concerned with, in North Carolina we all see the storm surge, and a lot of people may think it is over. But anybody that lives in North Carolina knows that about two or 3 days later that is when we are going to get some of the worst flooding as the river basins drain out to the coast.

So is the Risk Rating 2.0 considerations comprehensive? Do they take that into account, or do we need to do more on that, moving forward? That is for Mr. Ellis and Mr. Lehmann.

Mr. ELLIS. Thank you, Senator Tillis. And also in North Carolina a lot of the concentration is looking at the coast, but you have huge instances of riverine flooding and where storms have just parked themselves over there and repetitive losses in places like Lumberton or Princeville. So this is certainly a big issue.

And yes, I do believe that Risk Rating 2.0, and it is something that is iterative and we are learning more about it. I will point out that FEMA points out that almost 25 percent of the properties are going to see less premium under Risk Rating 2.0. But it is intended to be more forward looking, to be more extensive than what we currently have.

And certainly your State, the State of North Carolina, has been a leader in mapping and putting this information about there, and making it publicly available for either futurecasting or even looking at real-time with storms. And so I really salute the State of North Carolina in their efforts.

Mr. LEHMANN. And I agree. North Carolina was an innovator in using LiDAR, which provides accurate three-dimensional picture of waterflow drainage, et cetera. That is the direction that Risk Rating 2.0 takes. Risk is much more granular than the old-school paper maps ever showed, and moving in a direction that looks at property level risk, which also if you take into account mitigation at the property level is really important.

Senator TILLIS. Yeah, I am glad to hear you say that. I was going to brag on North Carolina, but it was something that I worked on as Speaker of the House to make sure that we could see that the lack of information was causing what I thought were unreasonable outcomes and risk assessments, so I am glad that you all recognize that that investment that we made has paid off.

Can you go back and briefly—I think it is very important, because I think a lot of people think that this is an across-the-board increase in flood insurance. Could either one or both of you maybe add to what the other one says? Mr. Lehmann, we will go with you first. Can you briefly summarize how these rates are going to be spread out across the insurer base? It is my understanding that about 4 or 5 percent may experience a significant increase. Some will have a decrease and some in the middle will have a moderate increase. Can you give me a little bit more flesh on the bones?

Mr. LEHMANN. Sure, and I believe that Steve has those specific figures in his testimony so I might defer to him.

Senator TILLIS. OK. Mr. Ellis.

Mr. ELLIS. Yes. Thank you, Senator Tillis. So yes, you are absolutely right. According to FEMA, that 4 percent will see an increase of more than 20 percent a month, but those are for high-value homes in high-risk areas. But 23 percent will see an average decrease of \$86 a month, and 66 percent will see an increase of less than \$10 a month, and another 7 percent an increase of less than \$20 a month.

And I would also add that we are still talking about affordability issues as well. So it is not just, you know, we still should have means-tested assistance outside the rate structure. If people cannot afford those premiums, it changes. Well, then we should certainly do it. Even if their premiums decrease they may not be able to afford their premiums and we should have means-tested assistance in the appropriate areas.

Mr. LEHMANN. Absolutely.

Senator TILLIS. Thank you all very much. Thank you, Mr. Chair.

Chairman BROWN. Thank you, Senator Tillis. The next two Senators—and I may have to step out to do Finance Committee real quickly—is Senator Warren and then, I believe, Senator Kennedy. And perhaps after the two of them is Senator Van Hollen, but I do not know for sure. But Senator Warren, you are recognized for 5 minutes, from Massachusetts.

Senator WARREN. OK. Thank you, Mr. Chairman. So floods are our country's most costly natural disasters. Climate change is worsening this crisis, sea levels are rising, severe storms are becoming more frequent, and as a result our floodplains are spreading and putting more people at risk every year.

By 2050, 1 in every 10 properties in Massachusetts is projected to face a substantial risk of flooding. In Boston, it is even higher, at 30 percent, and in communities like Hull, Massachusetts, more than two-thirds of properties will be at risk.

Now the National Flood Insurance Program, NFIP, is designed to help homeowners in at-risk areas rebuild after a flood, but that is really only part of the picture. It is also a tool to prevent and mitigate the damage to our communities before the flood hits, including making sure that we have the right infrastructure to protect property from rising water levels.

Ms. Smith, study after study tell us that it pays to prepare. For every dollar the Government invests in disaster mitigation, we get about \$6 in return on that investment. So let me just ask you, are we spending enough on efforts to lower the long-term risk of loss from floods?

Ms. SMITH. Senator, thank you for that important question, and the answer is no, not by a long shot. We have been stingy in predisaster planning and investment, and that ends up costing us in damages, not just to property but lives and livelihoods. And NIBS, the folks who give you the 6-to-1 number, they have recently said that our Nation's disaster investment gap now exceeds \$520 billion.

Senator WARREN. Wow.

Ms. SMITH. Now that is all disasters, but flood is a big chunk of that.

So we need better building and we need more investment. You know, communities in your State are trying to help people elevate.

We need projects like, for example, the Charles River project that the Army Corps did years and years ago. Preserving thousands of acres of wetlands has paid benefits in reduced damages.

Senator WARREN. That is very helpful. Thank you.

You know, a recent study found that only about 1 percent of properties insured by the NFIP suffered repeated losses, and yet these properties account for more than 30 percent of claim payments. So we have to find ways to make these properties and the floodplains and coastlines where these homes are located more resilient, or the NFIP will never be sustainable.

So beyond restoring and protecting our natural infrastructure, we can also protect against flood losses by investing in our physical infrastructure, like strengthening building codes, elevating buildings, as you mentioned, moving costly HVAC units to higher floors.

Mr. Berginnis, do you agree that if the NFIP is ever going to be self-sustaining, the Federal Government is going to have to dramatically increase funding for physical infrastructure, such as water resource projects and robust funding of the Army Corps of Engineers, that helps build this infrastructure?

Mr. BERGINNIS. Yes, Senator Warren, absolutely. And when you look at our national flood mitigation approach and the investments in infrastructure, I think multiple agencies have pieces of this, right. The Corps of Engineers tends to do the larger flood control projects, and they definitely have a role. As the panel, as many folks have said, the situation, especially on the coast, is only going to get worse.

But then FEMA has a role too, in terms of investing, in particular more building-by-building and smaller mitigation projects. And even agencies like the Department of Agriculture, through conservation programs and things, they have a role too.

So I think when we do all of those together, we need to triple down on our investment, in terms of infrastructure and resiliency.

Senator WARREN. That is very helpful. Thank you.

Climate change is the biggest threat to NFIP programs and to the families that rely on this program to insure their homes. So we have to remember that NFIP is just one of the tools the Government has to protect communities from the immediate and catastrophic impact of climate change.

A big piece of this is addressing climate change head-on, and that means ending our dependency on fossil fuels and investing in renewable energy and coastal restoration in natural resiliency. And until we get serious about canceling climate, that tackling climate change, we are going to be treating NFIP as a bottomless bucket that we can never refill fast enough. Now is the time to act.

So thank you all very much for being here. Thank you, Mr. Chairman.

In the absence of the Chairman, I think Senator Kennedy is up next.

Senator KENNEDY. Thank you, Senator. Can you hear me OK? Can you hear me OK?

Senator WARREN. Yes.

Senator KENNEDY. I want to thank the Chairman and the Ranking Member for calling this hearing. I am curious why FEMA is not here, particularly Mr. Maurstad, who is in charge of Risk Rating

2.0. But I am sure my friends at FEMA are listening, so let me direct this next comment to them.

Have you lost your frigging minds? This is the most—"this" meaning Risk Rating 2.0—is the most massive change to the NFIP since we created it in 1968. Why are you trying to ram it down everyone's throat, including, but not limited to, the people who are going to be affected by this change? We have five million policyholders, and 3.8 million are going to see their rates go up, at least. They have no idea why.

Now I get that there is a spreadsheet, an arithmetic side to this problem, but there is also a human side. A lot of the people, most of the people that your Risk Rating 2.0 is going to impact are not wealthy homeowners with a second or third home on the beach. That is certainly not the case in Louisiana. Most of the people, FEMA, that you are going to impact get up every day, go to work, obey the law, pay their taxes, try to do the right thing by their kids, and try to save for retirement. And their biggest financial asset is their home. And in 5 months' time, without even a public notice and comment opportunity, you are going to ram through changes that potentially could make their home unaffordable, and affect its value and make it impossible to sell.

Have you lost your frigging minds?

I am very disappointed with the way this whole process has been handled. People do not understand Risk Rating 2.0, and FEMA has done virtually nothing to help them understand.

Ms. Sternhell, what has been your experience? Do you understand Risk Rating 2.0?

Ms. STERNHELL. Senator, you put it immaculately. I could not agree more. The city is greatly concerned because we have no idea where this is going to land, what communities it is going to target. They have not made public the algorithm by which they are going to calculate many of these rates. Appendix E is not available online yet, according to their report. They have put out that it is only monthly increases of \$10 or \$20. Well, you know, most people pay at once, and if most people cannot afford a \$400 emergency, how are they going to afford another, you know, \$250 in insurance premiums a year?

We do not know where this is going to land. There has been no consultation with local government. There has been no consultation with us, who are dealing directly with constituents, and yes, we are very, very concerned.

Senator KENNEDY. Well, I am too, Ms. Sternhell. I am very concerned. And given the lack of transparency, which is breathtaking, and the speed with which the new FEMA is trying to move this, and ram it down everybody's throats, you can pretty this up all you want to, but it just looks to me like a massive rating increase that they do not want to explain to the policyholders.

I mean, what is the point of the flood insurance program? The whole point is to strike a balance between solvency and affordability. But what good is it to have a program if nobody can afford it, for God's sakes? In your opinion, Ms. Sternhell, you may not know the answer to this, but we have got 2,000 levees in my State, many of which have been paid for not by the Federal Government

but by Louisianians through their taxes. Have the folks at FEMA taken into consideration the levees?

Ms. STERNHELL. I think that is a factor, though again, we have not seen it explained in plain English. We have not been consulted. We have not had it walked through. You know, I got the very helpful infographic on the New York State Profile that said 93 percent of rate-payers or subscribers in New York will see their rates either go up or down.

Senator KENNEDY. I am out of time, but to my friends at FEMA, hello. Hello. I realize that today we cannot find you with Google, but you need to come before the U.S. Congress and express what you are doing here, and you need to come before the policyholders and explain what you are doing here. And you need to come before all of us and explain that you actually understand what you are doing here, because I do not think you do.

Thank you, whoever is chairing this thing.

[Pause.]

Senator VAN HOLLEN. Well, Senator Kennedy, this is Chris Van Hollen. I think I am going to ask my questions now. I do not know who I am supposed to hand it over to, but let me thank all of our witnesses for being here today. Thank you for your testimony. I think we are seeing, in this debate, the increased costs that families are experiencing every day, from climate change, from rising sea levels, from other impacts of climate change, and we have got to have a strategy as a country.

That strategy has to include two parts. One part is addressing climate change head-on, and President Biden has put forward a plan as part of the American Jobs Plan to address those issues, to dramatically reduce our reliance on fossil fuels and move toward a clean energy future. And if we do not do that, the costs will go up and up, to taxpayers, to rate-payers, and to everybody else. The other thing is to work through adaptation and mitigation, and obviously the flood insurance programs is part of trying to support families, in homes that are particularly hard hit during these times.

I would like to just step back, broaden the lens a little bit, and talk about Federal Government investments, whether they are in roads, bridges, transit, buildings, shipyards, other sort of things, and recognize that in order to save taxpayers money in the future, we have to build now and going forward in a way that incorporates resilience. Otherwise, we are going to invest money in, you know, say a highway in a floodplain right now, and if it is not built in way that can withstand the impact of climate change, it is going to be a real loss to taxpayers. And so better investment up front in hardening these things, rather than paying more in the end.

Obviously, with Colonial Pipeline, we are already seeing the negative impacts of not hardening our cyber infrastructure against attacks. We need to be doing the same thing with our other physical infrastructure in the area of transportation and other things.

And so in that regard, the Obama administration put forward a Federal Flood Risk Management Standard. The GAO, an independent entity, looked at it and concluded that that standard could help with mitigating the harmful impacts on future Federal infrastructure investments. Unfortunately, the last Administration, the Trump administration, eliminated that standard. So Senator Brian

Schatz and Senator Booker and I are reintroducing our legislation to establish in law what that Biden-era standard did through regulation. I have also questioned the Biden administration about it, and I hope that they will move forward in reinstating that important standard to adapt and to save taxpayer money dollars.

I do want to ask Ms. Smith just to comment on this. Shouldn't we, as a Government, be making investments with taxpayer dollars in a way that foresees these risks and costs if we do not build in a resilient manner?

Ms. SMITH. Yes. Thank you for the question, Senator, and thank you for being an advocate on this important issue. It is just common sense. You know, anyone who is building, making a big investment, needs to look at how long that is going to last and how long you want it to last, the design life. If you look only at the flood map that tells you what the flood was yesterday, and try to build to protect against yesterday's flood, over and over again, you potentially can be hit by damage and disaster. We waste Federal tax money. As someone else pointed out on the panel, you put infrastructure in risky areas, houses follow.

So we definitely need that Federal risk standard back in place.

Senator VAN HOLLEN. Well, I appreciate that. I mean, I realize the previous Administration was essentially climate change deniers, including the President of the United States, but all of us have an interest in protecting American taxpayer investments. And for the life of me I am not sure why they eliminated a provision which GAO has indicated would help prepare and would save taxpayer dollars.

So we need to press forward with this. Thank you for your input on this. And now I am going to be turning this over to Senator Cramer, for questions.

Senator CRAMER. Thanks a lot, and thanks to all of the witnesses. You know, I just really have one questions, and I do not care what order we go in. Maybe start with Ms. Kagan. But one of the most common concerns that I hear from homeowners and other stakeholders on this issue of NFIP reauthorization is really the need to ensure that there is not a penalty for homeowner transferring between the Government programs, NFIP programs, and private flood insurance. And I am just wondering if you could, first of all, just give a basic opinion, but a rationale for that.

Ms. STERNHELL. The city's view is that everybody should have coverage, whether it is coming from NFIP or the private sector. So we would certainly encourage everyone to maintain coverage, whether you are switching to the public program or you are going to private insurance, because at the end of the day we want people protected.

Senator CRAMER. Sure. And go ahead. I am sorry. Go ahead.

Mr. LEHMANN. Senator, so a lot of the implementation of bigger waters, allowing private flood to satisfy the mandatory purchase requirement has been accomplished in the last few years by lending regulators, but this is one area that Congress could still provide clarity, that if you leave the NFIP, go to a private insurer, and then want to return to the NFIP later—maybe the private insurer you went to leaves the market, maybe they raise rates significantly—that you could still get the rate you would have gotten as

if you had not left in the first place. And I think that is a valuable thing that Congress could provide is clarity.

I also would help the private market. It would help both the private market and the NFIP, because the private market needs to attract people, and that is a concern people would have about buying private flood is, is it a one-way street and I can't go back?

Senator CRAMER. Mm-hmm. Sure. Mr. Ellis.

Mr. ELLIS. Yes. Thank you very much, Senator Cramer. I absolutely, not surprisingly, agree with Mr. Lehmann, but that, yes, you want to have that portability. I mean, the only reason why somebody would leave the NFIP is if they have a better product or a better price, or both. But you want to make sure that then there is confidence that, OK, I am sticking my toe into the water. I want to make sure that if I do want to go back to the NFIP it is available. And so I think that will actually foster more people getting coverage, which is really what the whole goal should be, is that more Americans get flood insurance coverage.

As I pointed out in my testimony, only 5 million policies—we have well over 100 million housing units. We have heard repeatedly about flooding that occurs outside of the mandatory purchase areas, and so this is an area where we want to see more people getting coverage, and the way you are going to do that is if people are starting to buy their insurance from gecko at GEICO, or they are buying from Mayhem, and/or they are buying it from Flo.

Senator CRAMER. Sure.

Mr. BERGINNIS. Yes. Senator, if I could add to that.

Senator CRAMER. Please.

Mr. BERGINNIS. The continuous coverage provision is one we know that there is a desire to do. But one of the things, I think, that we elaborate on in our testimony is based on the principle of fairness between the NFIP and private insurers. In the changes in 2012 and 2014, there are a couple of additional changes that are needed to make sure the NFIP is actually on a level playing field with private. For example, we have long proposed this concept of an equivalency fee that is equal to national policy fee to help pay for floodplain management and mapping. The mapping, even for private policies, delineates where you have to buy flood insurance. It inherently is helpful to private industry.

Also, we need to make sure that communities are not dropping out of the program because they know private flood is available. And then finally, we need to address the discretionary acceptance loophole, I guess is what I will call it, a rule that the regulators passed in 2019, that, quite honestly, runs totally contradictory to what Congress directed in terms of private policies. Thank you.

Senator CRAMER. Yep. Well said. Thank you. That is good with me, Mr. Chairman.

Chairman BROWN. Thank you, Senator Cramer. I believe Senator Smith is asking a question of the Committee right now, so we will go to Senator Warnock for 5 minutes, the Senator from Georgia.

Senator WARNOCK. Thank you so very much, Mr. Chairman. As a native of Savannah, Georgia, the city by the sea, this issue of flooding is deeply personal for me and for folks I know, including, you know, my own family, my own hometown. An analysis from the Union of Concerned Scientists noted that the Savannah area expe-

riences some level of flood approximately ten times a year. Just 40 years ago, that was five times a year. By 2030, they are predicting 30 coastal flooding events per year and 100 flooding events by 2045.

I am extremely concerned about the impact of these flooding events, particularly on low-income communities and their vulnerability to climate change. This issue is particularly timely for Georgia's coastal communities. We all kind of shake in our boots this time of year, the closer we get to the hurricane season.

Mr. Berginnis, how will increased flooding events driven by climate change affect coastal communities like Savannah? Particularly, how will a greater frequency of these events affect low-income communities near the coast?

Mr. BERGINNIS. Well, Senator, thank you for the question, and of course, when we think of low-income communities we immediately understand that that is the segment of the population that is the least resilient to flooding.

And so, you know, where we may have had a big flood that would affect folks occasionally, by having more repetitive flooding, for folks of low income, it will significantly degrade, I think, their quality of life, especially if we do not help support, through mitigation and also through things like affordability programs for flood insurance, mean-tested affordability.

So we need to bring to bear all the resources—the mitigation resources, affordability assistance—and also build capacity so that they can mitigate and enjoy the same benefits of the NFIP that others do.

Senator WARNOCK. Right. So around this issue of both vulnerability and affordability, as you know, a 2018 FEMA report found that the majority of homeowners who live in high-risk flood zones without flood insurance not surprisingly were low income and may be deterred from buying coverage due to expensive flood insurance prices. I understand the many considerations that led to FEMA's decision to enact a new pricing risk model for flood insurance, but I am concerned that this new pricing model will affect low-income communities in flood zones, those that have the least amount of resources.

Ms. Sternhell and Ms. Smith, Congress has been grappling with flood insurance affordability for many years, and this new pricing structure is intended to contain the Federal costs of flood insurance. But do we risk unintentionally exacerbating the racial and socioeconomic disparities that already exist?

Ms. STERNHELL. Yes, Senator, I think we do. And part of the difficulty with this, as you heard from Senator Kennedy previously, is we do not know exactly where this new risk rating program will land and whether it will be concentrated predominantly in communities that are low income or majority minority or those that have been most disadvantaged. And that is one of the things that is most concerning.

Even part from this revised rate structure, the affordability challenge would be the same. The rates are going to continue to go up, but for the statutory limits on annual rate increases, people would see their rates going up even further. And we know with climate

change and with new maps coming in, that affordability issue is going to be exacerbated.

And so we need to find a good model that looks at how we can do affordability directly for that homeowner, and at the same time bring to bear the resources of the Federal Government and local government to mitigate more broadly, because we cannot just do it home by home. We need to do it at the community level, and we need to pull together as a Nation and communities to actually ensure that we can protect these residents, keep them in their home, and/or get them somewhere safer and ensure they maintain their assets.

Senator WARNOCK. Yes, Ms. Sternhell.

Ms. SMITH. Yes, Senator, this is Ms. Smith, and I would say that we can do both of these things, and that actually, Risk Rating 2.0 in some respects helps those people who are least able, who have policies now, and have been paying too much in order to cross-subsidize the higher priced homes.

But I think we can then do an affordability program on top of that that addresses both rate and assistance for mitigation, and I think if we allow FEMA to look at social vulnerability as one of the factors in giving grants, this will help solve the problem.

Senator WARNOCK. So, you know, inasmuch as most folks have a majority of their wealth in their home, this obviously has implications for the racial wealth gap and underscores the need for public policy that ensure that everybody who needs or wants flood insurance can get it. And it seems to me that we have an obligation in Congress to make sure that is the case.

Thank you so much.

Chairman BROWN. Thank you, Senator Warnock. Senator Daines from Montana is recognized for 5 minutes, then Senator Smith.

Senator DAINES. Thank you, Chairman Brown, and thanks to our witnesses for being here today.

When we talk about floods, a fact of life in Montana, it is what makes flood insurance a big deal in our State. We have leading companies that provide hundreds of jobs and thousands of national flood insurance programs, policy folders. That is the reason I am encouraged by the upcoming rollout of FEMA's Risk Rating 2.0 pricing methodology.

As I chat with Montanans who work in and around flood insurance industry, and to those who hold policies, it seems like the Risk Rating 2.0 enjoys broad support and will increase fairness in the NFIP.

However, I have heard from some of the companies back in Montana they want to make sure they have enough time in between the finalization of Risk Rating 2.0 to understand how it works and the impacts before it actually goes live.

Mr. Ellis, do you think FEMA should consider allowing a bit of time for private industry to understand the impacts of Risk Rating 2.0 before it is ruled out? To be clear, I would like to see this implemented swiftly, but the Government unfortunately does not have the best record when it comes to the rollout of new programs. Mr. Ellis, your thoughts.

Mr. ELLIS. Well, Senator Daines, that might be an understatement about FEMA not doing very well with the rollout of pro-

grams. Certainly we have seen that time and again. I can understand some of Senator Kennedy's frustration that he brought up earlier about not knowing all the details. I do know that FEMA is going to be coming and presenting before Congress.

But I definitely think that, yes, there needs to be a pause to make sure that there is greater comfort, and I think it makes sense. The reality, though, I will say, is somebody will have an axe to grind. I mean, we know that. Ms. Sternhell talked about the delay in maps and stuff like that. Some of that is because communities have—I cannot speak directly for New York City, but some of those communities have opposed the maps and stalled them for decades, and so that is part of the reason. I can certainly see that happening with Risk Rating 2.0, and so it is just going to be a balancing act. But certainly there needs to be less of a black box and more confidence in what the information is, Senator Daines.

Senator DAINES. Mr. Lehmann, do you have anything to add to that?

Mr. LEHMANN. Yeah. You are not doing anyone a favor by hiding from them what their real risk is. I support Ms. Smith's proposal for a flood history in every real estate transaction, but you should also have, on your policy, whether you are a grandfathered policy or a subsidized policy or if you create a new affordability metric, you should know what the full risk base cost of your insurance is. If you are getting a discount, you should know how much that discount is.

This is not just about saving money for the Government. We want people to understand their flood risk so that we have fewer helicopter pulling people off of roofs.

Senator DAINES. Thank you. According to FEMA's analysis, about 37 percent of policyholders will immediately see their premiums decrease under Risk Rating 2.0. About 58 percent of Montana policyholders will see an increase of somewhere between 0 to \$10. However, even that second group of policyholders is likely to be better off than they are now, as the current structure of the NFIP raises the premiums every year of all policyholders.

Mr. Ellis, do you think the current structure of the NFIP is fair, and beyond Risk Rating 2.0, what can we do to help improve the NFIP?

Mr. ELLIS. Sure, Senator Daines. So right now, as documented in this hearing, there are enormous cross-subsidies, particularly from rural counties to coastal counties, and from less affluent to more affluent, and certainly the more affluent get the bulk of the subsidies. And so certainly there are issues there.

Also, the way the rate structure is, it is supposed to try to pay for itself every year, and so it counts in catastrophic loss years and it counts in every historical loss year to try to calculate these premiums. And so it does end up penalizing some groups. And also it does the insurance in broad swaths, in zones, when, in reality, a homeowner may have a different risk profile than their neighbor, and certainly than the next subdivision, yet they are all kind of washed together in these very broad categories that do not target the rates.

Senator DAINES. Thank you, Mr. Ellis. Mr. Lehmann, do you believe the NFIP could help protect taxpayers through using additional reinsurance to help transfer more risk to the private sector?

Mr. LEHMANN. To date, the reinsurance program that the NFIP has enacted has worked out pretty well. In 2017, in particular, they recovered in full.

Like anything else, the NFIP should approach reinsurance as a consumer. There will be changing in pricing in reinsurance. Sometimes it will be more affordable and a better bet for you, and sometimes less. But that, as a risk management tool, is a great thing to have in the quiver, going forward.

Senator DAINES. Thanks, Mr. Lehmann. Chairman Brown, thank you.

Chairman BROWN. Thank you, Senator Daines. Senator Smith of Minnesota is recognized for 5 minutes.

Senator SMITH. Thank you, Chair Brown and Ranking Member Toomey, and thanks to all of our panelists. I have a question, and I will ask for your forbearance because I have been in between committee hearings today, if I ask you to answer it again, but it is really important in Minnesota. This is a question about how we can encourage more communities to sign up for NFIP, and it is really important in Minnesota because, as it turns out, Minnesota has one of the lowest participation rates in flood insurance. Only about 0.4 percent of eligible properties receive coverage under NFIP, and only 7.6 percent of Minnesota structures in high-risk floodplains carry flood insurance. And this is occurring even though Minnesota is a relatively high flood risk State, and, of course, due to climate change and more extreme weather events, that number is only getting worse, not better.

So my question is this. As we face these big challenges with large rain events, these sort of so-called pluvial flooding that is going to be included, as I understand it, in the new Risk Rating 2.0 system, how do we balance this out? We need to dramatically expand the number of households covered by NFIP. We also need to make sure—we know the premiums are not sufficient to cover the increasing cost of coverage, and we have got this rising debt challenge.

So my question to all the panelists, and maybe I will start with Ms. Smith and Mr. Berginnis, how do we balance out these values, encourage participation, and also address this affordability challenge?

Ms. SMITH. Senator, it is an important question. I mean, it is the fundamental question before the Committee. It is how do you weave all of these pieces together. So I think we have to really up the game on mitigation assistance. I think the other thing to do is, as Mr. Berginnis mentioned, help communities that are under-resourced. In my own State of Virginia, there are many, many communities that do not have certified floodplain managers.

So if we can help those small, under-resourced communities find technical assistance from FEMA, work as partners with FEMA, get funding from FEMA, and allow them to work with neighboring communities, with the Silver Jackets Army Corps program and other programs, to help them buildup their capacity in this area, then we can have more participation in the NFIP.

Senator SMITH. Thank you. Mr. Berginnis, would you like to respond too? Anybody else?

Mr. BERGINNIS. Sure. You know, one of the issues in Minnesota, having known for most of my career the State floodplain manager there, is in a way you are a victim of your own success. Minnesota has been effectively managing flood risk for decades, and I almost think that from the standpoint of when it floods and not a lot of people are affected that has psychological impact of saying, well, geez, we don't have to do something about it.

Nonetheless, as Ms. Smith said, this is an age-old problem of the NFIP, penetration rate. How do we increase that? FEMA has a role to play in that, but honestly, so do States and communities. And so I like Ms. Smith's idea of building State and local capacity to help communicate the risk and help encourage folks. And again, one of the ideas we have is significantly expanding the Community Assistance Program.

Senator SMITH. Thank you. Would anybody else like to respond?

Ms. STERNHELL. If I may. I mean, one of the things we confront within New York City is that there are a number of properties outside the Special Flood Hazard Area, or Zone X, where you can get a preferred risk policy. Now what happens with this with regard to Risk Rating 2.0, setting that aside for the moment? If people are buying those policies, we want them to, right, because they are lower flood risk and they get a preferred rate. But there are still no mitigation options available to them to lower that rate further.

And so encouraging that mitigation and pushing FEMA to find alternatives so we can say, hey, here is a really low-cost policy. You can do this mitigation and it will go down even more. We can bring more people into the program so that they are covered in the outside event there is a flooding event for them.

Senator SMITH. Thank you.

Mr. ELLIS. Senator Smith, if I may, just really briefly—I know you do not have much time—but there is sort of the tyranny of the 100-year floodplain, and that is people think they are either in the floodplain or they are out of the floodplain, when, in reality, we are all in some sort of floodplain. And so there is the issue of where people think if they do not have to buy it then they do not buy it.

And so some of it is risk communication that we talked about. Some of it is getting the private sector involved. More people selling flood insurance, more familiar people selling flood insurance, so that people can bundle their policies with their and their homeowner insurance. There is a whole variety of tools and tactics that I think can be done in that way.

And the other thing is, and this was brought up when I testified in House Financial Services, we need to have like a crosscut of the Federal budget of all the disaster spending and mitigation programs so we can really better target that, and then it also will hopefully promote better flood resilience but also better take-up of the flood insurance program.

Senator SMITH. Thank you very much. I think my time is up. Thank you, Mr. Chair.

Chairman BROWN. Thank you, Senator Smith. Thank you all. I just thought the idea of sweeping across this panel where no real partisanship, not even much ideology, just how are we going to

solve this. So I just thought all five of you were really, really helpful. It has demonstrated the importance and the complexity of NFIP, its interrelated activities of ensuring and preventing flood damage as these various questions affect the things people care about most—their homes, their businesses, their communities, their future.

Congress has struggled, as Senator Toomey said, to settle these complex questions through reauthorization. I am encouraged we have heard a lot of agreement across the panel, particularly around the areas of investments in mapping and mitigation—we need to get serious about that—and concern for people who struggle to afford the protection they need.

So I will continue working with Senator Toomey and others on this Committee. The questions from Committee Members I felt were really good too and provided a lot of insight. So thanks to the witnesses.

For Senators who wish to submit questions for the record, these questions are due 1 week from today, on Tuesday, May 25. To the witnesses, you have 45 days, if you would, to respond to any of those questions.

So thank you again. With that the hearing is adjourned. Thank you so much.

[Whereupon, at 11:49 a.m., the hearing was adjourned.]

[Prepared statements, responses to written questions, and additional material supplied for the record follow:]

PREPARED STATEMENT OF CHAIRMAN SHERROD BROWN

This hearing is the beginning of our effort to enact a long-term reauthorization of the National Flood Insurance Program this Congress. At a later hearing, we will invite the Federal Emergency Management Agency to discuss the status and reauthorization of the program.

Flooding is the most common and most costly natural disaster facing families, businesses, and communities across the country. It can take families' homes and memories, wreck their finances, shutter a small business, and destroy infrastructure and entire communities. And disasters often fall hardest on low-income families and communities who have fewer resources to prepare for and respond to them.

We can only expect flooding to get worse, and become even more common, as the climate continues to change.

People in Ohio and those in North Dakota, Maryland, Louisiana, and all over the country are already see more flooding, and they're feeling the consequences—whether from spring snowmelt, increasingly powerful storms, “sunny day” flooding in coastal communities, or extreme rainfall that overwhelms aging infrastructure and the land's capacity to absorb water. Just today, we are seeing flash flooding in Louisiana and Texas.

And no matter where you live, everyone pays for the financial fallout from floods, as the country spends tax dollars to help families and communities recover.

We know we must take action to protect communities from climate change, and seize all of the opportunities that come with that effort.

That's going to be a long-term effort. While we seek to halt the trajectory of our changing climate, we also need to help our families and communities become more resilient to the flooding we face now and in the coming decades, and whenever possible, avoid it altogether.

The NFIP is critical to that effort. The program provides over \$1.3 trillion in coverage to more than 5 million homes and businesses in over 22,000 communities.

The NFIP is not just an insurance program—its job isn't just to help with recovery, but to prevent and minimize the damage in the first place.

The NFIP combats the overall threat of flooding through four interrelated components:

- Flood insurance—to help property owners and renters recover quickly after a flood and reduce the need for Federal emergency spending;
- Floodplain management—to minimize damage to people and property, and make our communities more resilient through the adoption of local ordinances and building codes;
- Floodplain mapping—to identify and communicate that risk to first responders, homeowners, and communities so they can mitigate or avoid hazards all together; and
- Mitigation—to help remove property from harm's way through property-level and community investments that reduce our overall level of flood risk and save money.

Through NFIP reauthorization, we have an opportunity to make our families, businesses, and communities safer and more resilient.

Today, our witnesses will provide their perspectives on what this Committee should consider as we work on that effort. I am interested in their recommendations for ways we can help strengthen the NFIP so that it can:

- Provide reliable access to insurance for property owners and renters,
- Address affordability concerns,
- Ensure that more people are aware of their flood risk and insured against losses, and
- Help the Nation predict and reduce our overall level of flood risk through investments and improvements in mapping, floodplain management, and mitigation.

In 2017, then-Chairman Crapo and I began working with Members of this Committee on a long-term reauthorization.

This Congress, I look forward to continuing this work with Ranking Member Toomey and the Members of the Committee to strengthen the NFIP and the country's comprehensive approach to mitigating flood risk through a long-term reauthorization bill.

PREPARED STATEMENT OF SENATOR PATRICK J. TOOMEY

Thank you, Mr. Chairman. The last long-term reauthorization of the National Flood Insurance Program (NFIP) occurred in 2012. That 5 year reauthorization expired in 2017. Since then, we have had 16 short-term NFIP reauthorizations.

I am hopeful we can find the common ground necessary to avoid a 17th short-term reauthorization. However, our deadline, September 30, is closer than it may seem. I am ready to work quickly and cooperatively to find a path forward.

Before discussing what ought to be in an NFIP reauthorization, I would like to remind everyone of the scope of NFIP's challenges. Put simply, NFIP is broken.

Since 2005, the year Hurricane Katrina devastated the Gulf Coast, NFIP has had to borrow nearly \$40 billion from the Treasury in order to pay claims. In other words, NFIP has lost about \$2.25 billion per year over the last 16 years. Consider that \$2.25 billion per year loss in the context of NFIP's total annual revenue last year of approximately \$4.6 billion.

For the last decade-and-a-half, NFIP has averaged an annual loss representing about half its total annual revenue. In the real world, a private insurer that had this magnitude of losses year after year would cease to exist.

This brings me to an important point: the NFIP really should not be considered an insurance program at all. Rather, it is a subsidization program. Specifically, NFIP subsidizes the cost of living and building in flood prone areas. Usually, we subsidize activities because we want to encourage them. Perversely, in the case of NFIP, subsidies lead to more building and rebuilding in areas at extreme risk of flooding.

Exacerbating the problem, development itself within these flood-prone areas further increases flood risk and flood damage by covering absorbent green space with impermeable surfaces. And to whom do these subsidies accrue? The rich of course.

Properties with subsidized NFIP premiums are overwhelmingly located in our wealthiest communities. Likewise, subsidized NFIP premiums are rare in our lower-income communities.

Lately, this Committee has spent a great deal of time discussing climate risk and equity. I cannot think of a better opportunity to demonstrate a commitment to addressing both than in the reauthorization of NFIP.

The good news, if there is any, is that NFIP is on a slow but positive path towards actuarially sound premiums. This brings me to the key principle of reauthorization: do no harm. Reauthorization must not interrupt this important positive progress.

Next, we should continue to explore opportunities to bring more private capital into the flood insurance business. NFIP should continue to pursue opportunities to layoff risk to the private sector through reinsurance and other creative capital market structures. To the extent NFIP needs additional authority to do so, we should give it to them.

Additionally, we should continue to encourage private flood insurance as an alternative to NFIP. Increasing the availability of private flood insurance is a great way to get more homeowners insured against flood damage—a worthwhile goal that is good for the homeowner and the taxpayer. Further, if the private sector can offer better coverage, better service, and a better price, who are we to stand in the way of that for our constituents?

Additionally, to the extent subsidies continue to exist within NFIP, we should explore opportunities to target them towards those most in need. However, I would remind my colleagues of the perverse incentives involved in flood insurance subsidies and urge great caution.

Finally, I hope we take this opportunity to find a way to better explain flood risk to policyholders and, perhaps more importantly, future homebuyers. Those who choose to live in flood prone areas should do so with eyes wide open.

Flood insurance provides some financial security, but flood insurance is not the National Guard or Coast Guard. It cannot rescue those stranded by rising floodwaters.

Flood insurance is not a time machine. It cannot give back the days, weeks, months, and—in some cases—years it takes to rebuild and recover from a major flood.

In conclusion, a long-term reauthorization must continue to move NFIP in a positive direction. I stand ready to work with my colleagues to achieve that goal.

PREPARED STATEMENT OF SENATOR TIM SCOTT

In reaction to this hearing's discussion around the compensation level for Write Your Own (WYO) carriers participating in the National Flood Insurance Program

(NFIP), I will take a facts-based approach based on elementary economic principles I learned as a small businessman and insurance agency owner myself.

The story of the WYO carrier participation rate tells us everything we need to know. In 2004, there were 107 companies participating in the WYO program. By 2016, that number had fallen to 75. Today, that number is at 56 companies.

If claims of sky-high compensation rates for insurers getting fat off taxpayers were true, why has the number of participating WYO carriers dropped so dramatically? We would expect to see the exact opposite, if such claims were true.

I have heard directly from one large participating WYO carrier that writes policies in South Carolina that it will undoubtedly leave the program if compensation levels are cut. Smaller carriers will be forced to do the same.

WYOs currently write 87 percent of all NFIP policies. They are a critical distribution mechanism for a product that allows millions of our fellow citizens to protect themselves from the risk of flooding. I agree that Congress desperately needs to make reforms to the NFIP that will ensure it is around for future generations and save taxpayers billions of dollars on an annual basis. That said, cutting WYO compensation would be a terrible mistake and one that would quash the moderate amount of private sector participation we have in the NFIP.

The Senate Banking Committee and this Congress should do everything in its power to encourage WYO participation in the NFIP, not hamper it.

PREPARED STATEMENT OF CHAD BERGINNIS

EXECUTIVE DIRECTOR, ASSOCIATION OF STATE FLOODPLAIN MANAGERS

MAY 18, 2021

The Association of State Floodplain Managers is pleased to participate in this hearing about the National Flood Insurance Program. We appreciate the opportunity to discuss our views and recommendations for the future of the program. We thank you, Chairman Brown, Ranking Member Toomey, and Members of the Committee for your interest in this important subject.

The ASFPM and its 38 chapters represent more than 20,000 local and State officials as well as private sector and other professionals engaged in all aspects of floodplain management and flood hazard mitigation, including management of local floodplain ordinances, flood risk mapping, engineering, planning, community development, hydrology, forecasting, emergency response, water resources development, and flood insurance. All ASFPM members are concerned with reducing our Nation's flood-related losses. For more information on the association, our website is: www.floods.org.

Floods are this Nation's most frequent and costly natural disasters and the trends are worsening. The National Flood Insurance Program or NFIP is the Nation's most widely used tool to reduce flood risk through an innovative and unique mix of incentives, requirements, codes, hazard mitigation, mapping, and insurance. It is a partnership between communities, States, and the Federal Government. The NFIP is the one tool in the toolbox that serves policyholders, taxpayers, and the public well. Our testimony is intended to provide a better description of these interdependencies as well as 20 recommendations for Congress to consider to reform the NFIP.

The NFIP Is a National Comprehensive Flood Risk Reduction Program

The NFIP was created by statute in 1968 to accomplish several objectives. Among other things, the NFIP was created to:

- Provide for the expeditious identification of and dissemination of information concerning flood-prone areas through flood mapping,
- Provide communities the opportunity to voluntarily participate in the National Flood Insurance Program in order for their citizens to buy flood insurance and, as a condition of future Federal financial assistance, to adopt adequate floodplain ordinances consistent with Federal flood loss reduction standards,
- Require the purchase of flood insurance in special flood hazard areas by property owners who are being assisted by Federal programs or by federally supervised, regulated, or insured lenders or agencies,
- Encourage State and local governments to make appropriate land use adjustments to constrict the development of land exposed to flood damage so homes and businesses are safer and to minimize damage caused by flood losses,
- Guide the development of proposed future construction, where practicable, away from locations threatened by flood hazards

- Authorize a nationwide flood insurance program through the cooperative efforts of the Federal Government and private insurance industry,
- Provide flexibility in the program so flood insurance may be based on workable methods of distributing burdens equitably among those protected by flood insurance and the general public who benefit from lower disaster costs.

Beyond merely providing flood insurance, the NFIP is unique as it integrates multiple approaches for identification of flood risk, communication of risk, and techniques to reduce flood losses. It is a unique collaborative partnership enlisting participation at the State and local level. It is a multifaceted, multiple objective program—a four-legged stool as it is often called. The four legs of the stool are (1) floodplain mapping, (2) flood standards, (3) flood hazard mitigation and (4) flood insurance. Altering one leg without careful consideration of impacts on the other three legs can have serious repercussions on reducing flood losses. The NFIP on the whole provides substantial public benefits as our testimony will further detail.

We must remember that 90 percent of natural disasters in the United States involved flooding, and all 50 States and 98 percent of counties have the potential to be impacted by a flood event. The NFIP, which is now over 50 years old, had paid over \$69 billion in claims (and half of that has come in the past 15 years). But beyond paying insurance claims, the NFIP has also mapped 1.2 million miles of streams, rivers, and coastlines—flood hazard data that is freely and widely available. It has invested more than \$1.3 billion in flood hazard mitigation for older, at-risk structures and into local flood mitigation planning. Because of the program, over 22,000 communities have adopted local flood risk reduction standards—far more communities than have building or zoning codes, which have resulted in \$2.45 billion of flood losses avoided every single year. The NFIP has provided innumerable public benefits, direct monetary benefits to taxpayers, and significant benefits to policy holders.

A Pivotal Time for the NFIP—and a Window of Opportunity

Today, the NFIP is preparing to embark on one of its most transformational actions in the past several decades—the implementation of Risk Rating 2.0. At its core, Risk Rating 2.0 is consistent with a reform that ASFPF and many other organizations have been calling for which is to ensure that through accurate insurance rating we can communicate the relative level of flood risk to property owners and renters. Of course this is a simplified view and implementing transformation like Risk Rating 2.0 is much more complicated, but we should keep the fundamental reason we are doing this in mind as additional reforms are considered. The timing of both Risk Rating 2.0 and your consideration of NFIP reform and reauthorization can be very complimentary. For example, a seemingly widely supported reform from the last Congress was the need for a targeted, means-tested way to assist lower income property owners with NFIP premiums. Now, Congressional reform ideas can be tested against the NFIP's more accurate rating approach in Risk Rating 2.0 to fine tune the approach. Over the past few months, ASFPF has been pleasantly surprised to learn that Risk Rating 2.0 will have the effect of generally reducing flood insurance premiums for those lower-cost, more modest homes than the rating approach in place now, resulting in more a more equitable program overall.

Today's NFIP must ensure that the Nation is ready to address tomorrow's flood risk. Floodplain managers know development often results in increased flood heights, and we observe changing weather patterns that result in shifting snowmelt/rainfall in the West, and nationally, more intense short duration storms are causing more flash floods. Additionally, unrelenting sea level rise (SLR) is beginning to affect communities from Florida and the Gulf of Mexico to Virginia and the Mid-Atlantic, and to Alaska. A 2017 NOAA report added a new upper boundary for SLR this century up to 2.5m (8 feet) by 2100 due to new data on the melting of the Greenland and Antarctic ice sheets. According to a 2018 report by the Union of Concern Scientists, accelerating sea level rise in the lower 48 States, primarily driven by climate change, is projected to worsen tidal flooding putting as many as 311,000 coastal homes with a collective market value of about \$117.5 billion today at risk of chronic flooding within the next 30 years—the lifespan of a typical mortgage. America's trillion-dollar coastal property market and public infrastructure are threatened by the ongoing increase in the frequency, depth, and extent of tidal flooding due to SLR, with cascading impacts to the larger economy. Higher storm surges due to SLR and the increased probability of heavy precipitation events exacerbate this risk. Inland, the situation is only slightly better, but is still problematic. A 2014 Climate Change Vulnerability Analysis by the Milwaukee Metropolitan Sewerage District shows that in the future to expect a pattern of increasing precipitation intensity in a few larger events but a decrease in the size and frequency of

many smaller events, which is also consistent with the National Climate Assessment. The mapping, mitigation, and floodplain management elements of the NFIP all have a role to play in addressing future flood risk.

More recently, issues of equity and social vulnerability have been recognized as needing to be addressed. FEMA's National Advisory Council's (NAC) 2020 report made the focus on equity a centerpiece of the vision of the future of emergency management. It noted that "For disaster preparedness, mitigation, response, and recovery to drastically improve in 2045, emergency management must understand equity and become equitable in every approach and in all outcomes. The exacerbated impacts of disasters on underserved and historically marginalized communities across the United States showcases existing inequity." We must examine the NFIP and proposed reforms through the lens of equity and social vulnerability to ensure that policies do not intentionally or unintentionally make these inequities worse and seek opportunities to reduce them. ASFPM is pleased to learn that Risk Rating 2.0 will lead to a more equitable program recognizing that lower value homes that have traditionally paid more for flood insurance will pay less (as compared to higher value homes). NFIP reauthorization and reform and modernizing our Nation's infrastructure should support States and localities' ability to reduce flood risk by increasing resilience, particularly for vulnerable communities. Legislation could facilitate identification of these communities through a data-driven approach and direct public and private sector resources, including grants, bonds, and tax incentives, to improve the resilience of these communities that, otherwise, could not make these investments on their own.

So what will the NFIP of tomorrow look like? ASFPM believes the Nation will continue to need a robust, fiscally strong NFIP to comprehensively reduce today's and tomorrow's flood risk. The program should strive to enhance equity and reduce social vulnerability. ASFPM is always vigilant that when it comes to NFIP reforms. We have seen far too many ideas over the past several years, that would change one element without consideration of how that change would impact the other elements of the NFIP (for example, changes in insurance shouldn't weaken the role of either mitigation or floodplain management. We must ensure that reforms carefully contemplate the potential impacts to the overall comprehensive approach to flood risk management that the NFIP provides so that we strengthen the Nation's overall resilience to flooding.

A Long-Term Sustainable Financial Framework Is Needed; Debt Is an Issue

The NFIP had generally been self-supporting until 2005. In the 1980s the program went into debt a few times and ultimately Congress forgave approximately \$2 billion. But from the mid-1980s to 2005, the NFIP was entirely self-sustaining and, when borrowing from the U.S. Treasury, the debt was repaid with interest. However, due to catastrophic floods in 2004, 2005, and 2012, 2016–2019 the program currently owes \$20.5 billion to the U.S. Treasury and since Hurricane Katrina, has paid \$5.06 billion in interest to the Treasury.

The NFIP was never designed to pay for catastrophic events. In fact, from 1968 to 1978 the concept was one of risk sharing with the private sector, with the program actually paying a subsidy to private insurers for pre-FIRM structures (structures built prior to availability of flood insurance rate maps). As recently as the late 1980s, internal communications show that the Administration reaffirmed the Federal treasury was essentially the reinsurer of last resort.

Congress and FEMA have made some progress toward putting the program on a sound financial footing as part of the past two NFIP reforms in 2012 and 2014, which ASFPM supported. Under BW-12, reforms (later modified by HFIAA-14) included changes that led to moving subsidized policies toward actuarial premium rates, allowing the NFIP to purchase reinsurance, and to establish a reserve fund. These changes help reduce the financial risk to the program (and ultimately to the American taxpayer) and better prepare for the ever increasing number of catastrophic flood events. However, those reforms did have a consequence of exacerbating the issue of flood insurance affordability. We also note Congress' very significant action to forgive \$16 billion of the NFIP's debt in 2017, and point out that the aforementioned reforms put in place in 2012 and 2014 to put the program in a better fiscal position continue today.

So what is next? ASFPM believes that Congress should consider reforms that don't endlessly put the NFIP at financial risk and at the same time, will also assure that the program remains consistent with a primary reason for having a Federal flood insurance program in the first place—to reduce the need for disaster declarations and subsequent emergency spending bills. As a point of comparison, the Federal crop insurance program now costs taxpayers approximately \$9 billion annually. Yet the program is not required to pay that debt back—with interest—while filling

almost exactly the same public policy goal; to reduce much larger costs to the taxpayers for agriculture disasters. Even those wishing to reform the crop insurance program aren't advocating to eliminate all subsidies nor considering the program a failure because the program results in taxpayer debt every single year; rather, reforms are targeted to certain subsidies, subsidy caps, and income limits.

- ASFPF recommends forgiving the remainder of the current debt and adopting some form of a "sufficiency standard" as an automatic, long-term mechanism within the NFIP that ensures, after a certain threshold of flooding, the debt will be paid by the U.S. Treasury, much like other disaster assistance.¹ Among other things, the sufficiency standard would consider the reserve fund balance, utilization of reinsurance, and ability of the policy base at that time to repay.
- At a minimum, the requirement for the NFIP to pay interest on the debt should be discontinued, or the interest and debt payments should be directed as reinvestments back into the program for needs such as flood mapping or mitigating flood-prone buildings, especially repeatedly flooded buildings.

ASFPF is worried that as we head into a likely more inflationary environment over the long term which could have the effect of increasing interest rates, servicing the debt will quickly become the largest financial risk to the NFIP. The fact is, today's NFIP has taken advantage of the numerous tools Congress has provided to make it more fiscally sound and is more of a public-private partnership than ever before, leveraging private sector financial risk management tools like reinsurance and catastrophe bonds, as well as enabling the market for private flood insurance. Much progress has been made over the past 8 years and Congress should take the final steps by recognizing these steps and permanently put the program on a sound financial footing by addressing today's and tomorrow's debt.

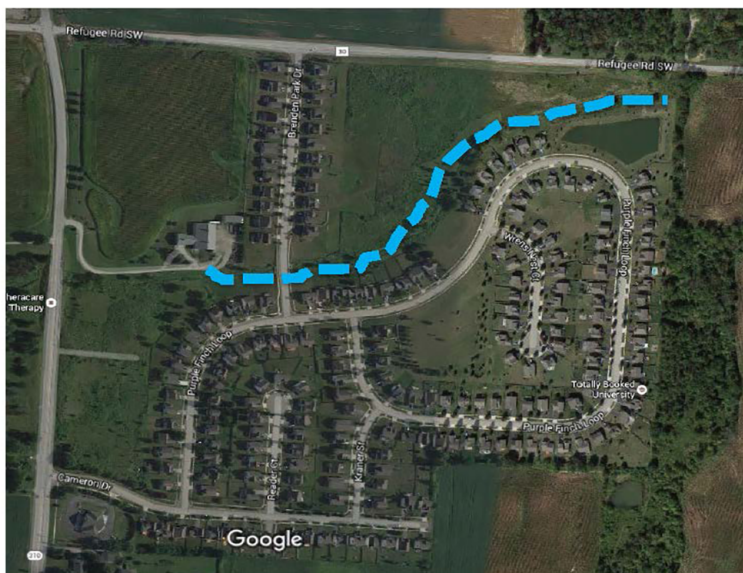
Floodplain Mapping

Floodplain mapping is the foundation of all flood risk reduction efforts, including design and location of transportation and other infrastructure essential to support businesses and the Nation's economy. The flood maps are also used for emergency warning and evacuation, community planning, and locating critical facilities like hospitals and emergency shelters. Today FEMA has in place the right policies and procedures (i.e., requiring high-resolution topography (LiDAR) for all flood map updates), and is using the best available technology to produce very good flood studies. For example, FEMA is doing some pilot studies in Minnesota and South Dakota using very precise topographic mapping and automated flood study methods to develop base level engineering that can be used as an input into future flood studies. This gives communities access to data immediately to use for planning and development rather than waiting years for the data. In coastal studies, FEMA now uses the state-of-the-art ADvanced CIRCulation (ADCIRC) model for storm surge analysis.

Today, flood risk maps only exist for about 1/3 of the Nation—only 1.2 million of 3.5 million miles of streams, rivers, and coastlines have been mapped. Also, even some of today's maps are many decades old, or were updated before the current standards to redraw boundaries based on more accurate study data and topography. ASFPF has repeatedly expressed concern that there is still a large inventory of pure "paper" maps that have never been digitized and modernized with newer flood study procedures. Many other areas have never been mapped, so there is no identification of areas at risk and communities have no maps or data to guide development to be safe from flooding. This is a significant problem and the example below illustrates why.

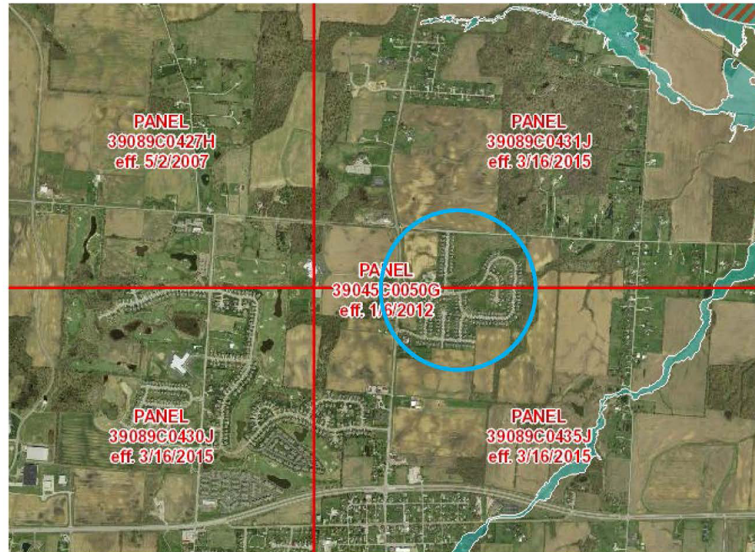
Cameron Chase is an 87-acre residential subdivision developed in the early 2000s in Licking County, Ohio. As a crow flies, it is 17 miles from downtown Columbus, Ohio (metro area population 2+ million). An unnamed stream flows through the subdivision:

¹Most insurance systems have some trigger for socializing risk of extreme events, such as a sufficiency standard based on a pre-identified event (i.e., a 1-in-25-year or 1-in-100-year event) beyond which mechanisms like guaranty funds pay losses. Adopting an explicit standard of this type for the NFIP would provide clarity as to what its funding sources should be and give Congress and taxpayers an understanding of when NFIP debt should be forgiven. Such an approach has been suggested by the American Academy of Actuaries for Congress to consider as part of a broader set of NFIP reform considerations their updated 2019 report *The National Flood Insurance Program: Challenges and Solutions*.



(Above: Aerial view of Cameron Chase division, Etna Township, Licking County Ohio. The unnamed stream is highlighted as the dashed blue line)

On the FEMA maps that were effective at the time and even on today's maps, the unnamed stream is not mapped. Why? The old guideline for mapping these small streams was that you needed about 10 square miles of land draining into the stream for it to reach a threshold for FEMA mapping in rural areas. In the case of this tributary, it only had about 760 acres or just over one square mile of drainage. Also, the land previously had been a cornfield, and as a result never had enough property at risk for FEMA to map prior to development:



(Above: Portion of FEMA FIRM Index Panel for Licking County, Ohio. The Cameron Chase subdivision is circled; note that the unnamed stream does not have a FEMA mapped floodplain – it does not show up until several miles downstream)

Luckily, Licking County has strong local floodplain management regulations that exceed Federal minimum standards and the regulations required the developer to map the floodplain on any stream where one wasn't identified. Prior to development a flood study (similar to one that FEMA would prepare) was completed and the result? A 1 percent chance floodplain identified that ranged from 150 feet wide to 300 feet wide and more importantly a map to guide the proposed development. But most communities do not have such standards and what happens then? The development occurs with no flood standards. Well, this is what is happening in thousands of subdivisions across the country: areas that used to be cornfields and cow pastures are developing into subdivisions with tens of thousands of housing units. Later, after there is significant development already built at risk and often after a flood or two, FEMA comes in and maps it. Then the dynamic changes and everything becomes adversarial. People think FEMA put a floodplain on them, when it was there all along. The property owner is mad because they have to buy flood insurance at high premiums because flood elevations were unknown. Realtors are upset because it is a surprise and may have an impact on the future salability of homes. And local elected officials fight to minimize the size of the mapped floodplain, spending thousands of dollars on competing flood studies. The entire dynamic can change if maps showing risk are available before development starts. You can see from the FEMA flood map above that there are many existing farm fields that will be developed in the next few decades (and there are small streams running through them too). We must map today's corn fields and cow pastures to assure that quality flood mapping precedes development.

For most of the history of the NFIP, flood mapping was done to primarily support two functions of the NFIP: flood insurance rating and floodplain management standards. As a result, two pieces of data were typically produced: the 100-year and the 500-year flood. However, as the NFIP grew and as flood risk management became more important, the Nation's citizens looked to the FEMA flood maps as the primary source of any kind of flood risk information for a given area. In 2012, Congress, for the first time, authorized a National Flood Mapping Program (NFMP) as part of the NFIP reform legislation which took this more expansive view of flood mapping. It required, among other things, several new, mandatory types of flood risks to be shown on the Nation's Flood Insurance Rate Maps (FIRMs) beyond the 100-year and 500-year flood including:

1. All populated areas and areas of possible population growth located within the 100-year and 500-year floodplains;
2. Areas of residual risk, including areas that are protected by levees, dams, and other flood control structures and the level of protection provided by those structures;
3. Ensuring that current, accurate ground elevation data is used;
4. Inclusion of future conditions risk assessment and modeling incorporating the best available climate science; and
5. Including any other relevant data from NOAA, USACE, USGS, and other agencies on coastal inundation, storm surge, land subsidence, coastal erosion hazards, changing lake levels, and other related flood hazards.

Unfortunately, ASFPM is not aware of any single flood map in the entire country that exists today where all of these data sets exist on either a FIRM panel or in the accompanying data FEMA provides. Therein lies the problem. We have had a National Flood Mapping Program authorized since 2012, but many key elements have not been implemented. In fairness to FEMA since 2012, progress has been made on improving the quality of the existing flood maps, in use of high resolution topography, and in the area of communicating information to communities and the public (either through the mapping process itself or through technologies and tools). Nevertheless, we believe these additional elements Congress required are essential for an effective national flood mapping program.

What is the gap then? ASFPM believes that the gap lies in getting the job of initially mapping the Nation done.

Consider:

- Based on the National Hydrography Dataset (NHD) and NOAA shoreline data, there are approximately 3.5 million miles of streams and rivers, and 95,471 miles of coastlines in the Nation. Currently, only 1.14 million stream miles and 45,128 shoreline miles have flood maps. By this metric, only about $\frac{1}{3}$ of the Nation has been mapped.
- Over 3,300, or roughly 15 percent, of NFIP communities have maps over 15 years old, with many of these over 30 years old and still having “un-modernized” paper maps.
- Many of the added mapping requirements from 2012 haven’t even been started beyond preliminary studies and research. This includes residual risk mapping around flood control structures and future conditions mapping. A 2016 TMAC report reviewing the National Flood Mapping Program stated: “To create technically credible flood hazard data, FEMA needs to address residual risk areas in the near term. Residual risk areas associated with levees and dams are of great concern.”
- In 2020, in a House Science Committee hearing examining FEMA’s flood mapping program, FEMA recognized these mapping needs and testified that appropriations simply have not been enough to make meaningful progress on the additional mapping responsibilities identified under the National Flood Mapping Program.

ASFPM believes this gap in data is contributing significantly to the increasing flood losses in the Nation. A 2018 study shows that the total U.S. population exposed to serious flooding is 2.6–3.1 times higher than previous estimates, and that nearly 41 million Americans live within the 100-year floodplain (compared to only 13 million when calculated using FEMA flood maps). This translates into 15.4 million housing units. The same study indicates that over 60 million people live in the 500-year floodplain.

In 2020, ASFPM completed the update to its 2013 report Flood Mapping for the Nation, which modeled the costs to fully implement the National Flood Mapping Program under the 2012 Biggert–Waters Reform Act and complete the initial flood mapping of the Nation. We conclude that it will cost between \$3.2 and \$11.8 billion to complete the mapping in the Nation and then cost between \$107 and \$480 million to maintain these maps as accurate and up-to-date.

To improve flood mapping in the Nation:

- ASFPM recommends the reauthorization, funding, and enhancement of the National Flood Mapping Program (NFMP).
- ASFPM supports an increased authorization for the National Flood Mapping Program to between \$600 million to \$1.8 billion annually in order to accelerate the completion of the job of initially mapping the Nation in 5 years and getting to a steady-state maintenance phase.

- FEMA must complete the initial flood mapping of the entire Nation to get ahead of development and must prioritize the elimination of the un-modernized paper map inventory in the Nation.
- ASFPM urges consideration of a one-time flood map funding investment of \$7.5 billion as part of any emerging infrastructure bill to finish the initial job of completing flood mapping for the Nation.

ASFPM notes that in 2016, a letter initiated by then Chairwoman Ranking Member Maxine Waters and signed by 43 House members, not only recognized the benefits of flood mapping, but urged Congress to get the job done by funding FEMA's mapping program at a level of \$1.5 billion/year for 5 years. A stepped up commitment to mapping flood risk is should really go hand-in-hand with any major infrastructure investment; otherwise, we risk making costly and important infrastructure vulnerable to both today's and tomorrow's flood risk.

Floodplain Management (Floodplain Regulations, Training, Public Education)

To participate in the NFIP, States and communities must abide by minimum development standards and designate a NFIP coordinator. At the State level, this means that there is a NFIP coordination office that provides technical assistance and training to communities and the public, serves as a repository for the State's flood maps, ensures the State has sufficient enabling authority for communities to participate in the NFIP and is the lead agency to ensure that State development is consistent with NFIP minimum standards. At the local level this means that more than 22,500 communities participate in the NFIP and have adopted minimum development and construction standards to reduce flood losses. As floodplain areas are identified and mapped throughout the Nation, NFIP participating communities must adopt and enforce local floodplain management standards that apply to all development in such areas.

NFIP standards are the most widely adopted development/construction standards in the Nation as compared to building codes, subdivision standards, or zoning. FEMA has estimated that for approximately 6,000 of the NFIP participating communities, the only local codes they have adopted are their floodplain management standards. Today it is estimated \$2.4 billion of flood losses are avoided annually because of the adoption and implementation of minimum floodplain management standards. Often communities decide to adopt standards that exceed the Federal minimums. For example, over 60 percent of the population in the United States lives in a community that has adopted an elevation freeboard—which requires the first floor of the building be at an elevation that is at least a foot higher than the base flood (or 100-year flood). A freeboard not only has the benefit of making the construction safer, but it can have a tremendous impact on lowering flood insurance rates. A freeboard of 3 feet can reduce premiums by more than 70 percent.

Why do communities participate in the NFIP and adopt local standards? State floodplain managers around the Nation who have enrolled nearly all of the communities in the past 40 years know a major reason is to make flood insurance available to their citizens. If a community hasn't joined (there are still about 2,000 communities not in the NFIP), it is usually compelled to do so when a resident gets a federally backed mortgage and needs to have flood insurance. While there are some non-participation disincentives in terms of restrictions on some forms of disaster assistance, such disincentives are weak and very limited. For most communities, they are not much of a disincentive at all, but getting flood insurance is a strong incentive. We must ensure changes to the insurance element of the NFIP do not undermine this incentive.

To enable the NFIP to provide better technical assistance to over 22,000 communities in the NFIP, the Community Assistance Program (CAP-SSSE) was developed in the 1980s. This program invests in building capability to do floodplain management at the State level in order to assist the communities in the State with their NFIP participation responsibilities because it would be impossible for FEMA to either directly assist that many communities or for the program to provide funding assistance to all communities in the program. It is important to recognize communities must meet the NFIP standards, they do so within the laws and framework that differs in each State, making it important States provide that assistance. For a modest investment of around \$10 million annually, CAP-SSSE leverages State investment to create and maintain the capability to do effective floodplain management at the State and local level. The entire floodplain management budget (100 percent), which includes staffing, community and State technical assistance, and the Community Assistance Program (CAP-SSSE), is funded out of the Federal Policy Fee. However, the CAP-SSSE program is not explicitly authorized.

- ASFPF recommends that a community assistance program which would provide resources to States be explicitly authorized and its funding doubled to maintain and expand community technical assistance through effective State floodplain management programs.

Although millions of American's homes are at risk of flooding, 21 States have no real estate disclosure laws. This makes it difficult for a home buyer to learn of a property's flood history. These States do not require sellers to tell prospective home buyers or renters whether a property has been damaged by a flood and limiting access to such information prevents people from making smart decisions about where to live. Unfortunately, many homeowners learn of their propensity to flood only after suffering through multiple disasters. The other 29 States have varying degrees of disclosure requirements. This hodgepodge of State and local policies hinders buyers from making fully informed decisions.

- ASFPF supports a national real estate disclosure requirement for a property's flood history. Such a requirement could be tied to a State's participation in the NFIP.

In 2018, the Natural Resources Defense Council researched this topic extensively and developed an interactive website where each State's flood disclosure law can be reviewed.

Flood Hazard Mitigation

NFIP has two built-in flood mitigation programs: Increased Cost of Compliance (ICC) and Flood Mitigation Assistance (FMA). These NFIP funded mitigation programs have resulted in more than \$1.3 billion in funds to reduce risk to thousands of at-risk, existing structures. The National Institute of Building Science's Multi-Hazard Mitigation Council, in its research of FEMA flood hazard mitigation projects, determined that such projects resulted in \$5 in benefits for each \$1 spent. ICC and FMA have mitigated, on average, 1,850 buildings annually between 2010 and 2014. ASFPF strongly supports both programs.

ICC is the fastest way to get flood mitigation done and is paid for 100 percent through a separate policy surcharge. Since it is simply part of the flood policy it isn't run like a typical grant, funds are available to the owner much quicker. It is a transaction between the insured and insurance company. Sixty percent of ICC claims are used to elevate a building and 31 percent of the time ICC is used to demolish a building. Other techniques used are floodproofing or relocation of the building out of the floodplain altogether. From 1997 to 2014, ICC has been used to mitigate over 30,000 properties.

ASFPF has been frustrated for several years over the pace of FEMA's implementation of its own authority to make ICC much more useful. In 2004 ASFPF worked with Congress to add triggers to ICC, so now there are four of them in the law:

- A building being substantially damaged,
- A building classified as a repetitive loss,
- A building where another offer of mitigation is being made,
- And the administrator's discretion to offer ICC when it is in the best interest of the flood insurance fund.

Of these four, only one trigger is being utilized—when a structure has been determined to be substantially damaged. While FEMA will claim it also applies ICC to repetitive loss properties, it is only if that subset of repetitive loss properties that have also been substantially damaged. The point is that there are three triggers—in existing law—that could be used in a predisaster sense. We are pleased to note that there is increasing Congressional recognition of the value of investment in predisaster mitigation.

Another frustration with how ICC is currently being implemented is the determination of how the ICC premium surcharge is set by FEMA's actuaries. Currently funding for ICC is through a congressionally mandated surcharge capped at \$75 per policy. The latest data ASFPF has is for calendar year 2014 where ICC brought in approximately \$74 million for mitigation. On average the ICC surcharge was about \$15 per NFIP policy—which is far below the statutory cap. However, as ASFPF has been discussing changes to ICC, including increasing the ICC claim limit beyond \$30,000, a response we often get is that FEMA would have a tough time making the changes because it is collecting as much as it can under the existing cap and that the surcharge rate is set using actuarial principles.

In its 2010 rate review, however, FEMA discussed how it was collecting more in ICC than it was spending and therefore adjusted downward the amount it would collect per policy in 2011. The result? In 2010 the surcharge collected \$84.5 million

and in 2011 the surcharge collected \$78.2 million. The point of this is that the rate setting becomes a self-fulfilling prophesy—FEMA’s decision to not implement ICC’s other triggers result in the program not being fully used. And its low utilization in turn led to FEMA determining that the rates should be lowered. So it gives the appearance there is room under the existing cap. ASFPM believes there is room under the existing cap. We suggest that Congress look at setting a tiered amount that would be consistent with the existing cap limit and reflective of risk. ASFPM calculates that under such an approach an ICC surcharge set at \$25 for BCX-Zone properties, \$50 for actuarially rated A- and V-Zone properties and \$75 for subsidized A- and V-Zone properties, would generate approximately \$227 million in revenue that could be used by policyholders to mitigate their flood risk.

ASFPM believes ICC needs two other adjustments by Congress to be more effective. First, while ICC is collected on every policy, FEMA believes the statute requires the ICC claim be counted toward the total claim limit. This means a home that gets a \$250,000 damage claim, the amount available for ICC is \$0. Second, the ICC claim limit is too low. Estimates to elevate a home range from \$30,000 to \$150,000 with an average closer to \$60,000. While \$30,000 is very helpful, it often does not come close enough to cover enough of the mitigation cost, to be practical or feasible, especially for lower income homeowners.

- ASFPM recommends the ICC claim limit be in addition to the maximum claim limit under a standard flood insurance policy.
- ASFPM recommends the “base” ICC claim limit be raised to at least \$60,000 to \$90,000 with the ability to purchase an optional additional amount of at least \$30,000 in ICC coverage.
- ASFPM recommends Congress specifically allow FEMA to utilize the available ICC amount for both demolition and acquisition costs as a means of compliance, when the claim is assigned to the community and deed restricted as open space.
- ASFPM recommends Congress waive any rulemaking requirements that may be an impediment to quickly implementing the predisaster triggers for ICC and allowing demolition and acquisition costs.

FMA operates like a typical grant program where a community applies through the State through a grant application. Further, FMA also funds other types of mitigation that can address issues on the neighborhood- or community-scale such as stormwater management systems to reduce flood risk and flood mitigation plans. In recent years, the priority for the FMA program has been repetitive loss and severe repetitive loss properties. While this is an important objective, ASFPM worries that an exclusive focus on such projects is increasingly resulting in a gap where no assistance is available for properties that desperately need assistance, such as older pre-FIRM, nonrepetitive loss structures for which insurance rates may be increasing significantly. ASFPM recommends that accommodations be made for these types of properties as well, when FEMA formulates its new policy guidance.

Repetitive loss claims unnecessarily drain the National Flood Insurance Fund, and today, there are at least 160,000 repetitive loss properties. Because increased flooding keeps adding more repetitive loss buildings, hazard mitigation efforts have been insufficient to reduce flood damage to older structures and ultimately reduce the overall number repetitive loss properties. Current mitigation programs within the NFIP are underfunded and not reducing the overall number of repetitive losses in the country. One idea for Congress to consider is a mitigation surge where Congress would supplement FMA funds with a large one-time or multiyear appropriation to either address the growing number of repetitive loss properties, or specifically address pre-FIRM properties where affordability of flood insurance has become untenable.

- ASFPM urges consideration of a one-time mitigation funding investment of \$5 billion as part of any emerging infrastructure bill to reduce the amount of repetitive loss properties and improve the financial stability of the NFIP.

Another idea for expanding mitigation that has merit is flood mitigation loan programs. After Superstorm Sandy, ASFPM worked with HUD to clarify that their Federal Housing Administration 203K loan program was available for flood mitigation purposes. Certainly loans have their place as a flood mitigation approach. ASFPM supports the State Flood Mitigation Revolving Loan Fund Act as a way to expand mitigation investment and its approach to emphasize flood preparedness as well as allowing States to develop their capacity in mitigation. We also support the ability of the program to offer grants instead of loans, especially in States where less funding might be available, and where State capacity and/or interest to administer such a revolving loan program may be lower.

ASFPF supports improvements to FEMA mitigation grant programs, like FMA to better address equity and social vulnerability. Increasingly, it is recognized that traditional benefit-cost analysis (BCA) which focuses primarily on damages and losses avoided favor high value homes and communities: it does little to recognize issues of social vulnerability. Further, FEMA's longstanding, restrictive interpretation and treatment of Uniform? Relocation Act assistance can result in inequities for those vulnerable especially who ultimately cannot participate in a mitigation project due to the inability to secure comparable safe, sanitary, and affordable housing. We've offered ideas in the past such as excluding costs of complying with other Federal laws like URA and environmental compliance laws from BCA calculations which would result in mitigation grants being more equitable as well as making progress on environmental justice issues.

- ASFPF supports Recommendation 2020–01 and 2020–22 of the NAC report which recommends the FEMA Administrator create an Equity Standard and that would encourage FEMA to assess the current process of distributing mitigation funds to determine which policies, regulations and legislation need to be revised so the outcomes are more equitable.

Flood Insurance

Flood insurance is the easiest way for a property owner to manage their flood risk. It was also viewed by the original authors of the program as a way to more equitably share risks and costs of development decisions. Yet too few property owners and renters carry flood insurance. Today it is estimated 10 percent of the population lives in an identified floodplain and that number is projected to grow to 15 percent by the year 2100 based on natural population growth and future conditions (land use, development, and climate change). While the NFIP provides some standards to reduce flood losses to new development, it has not helped communities avoid development in high flood risk areas. It is also estimated the number of policies increasing by 100 percent and the average loss per policy increasing by 90 percent in 2100.² The point is that these trends show growth in the human occupation of flood hazard areas and the potential damage that may result. As we have pointed out earlier, there are many more miles of rivers, streams and coastlines that aren't even yet mapped (which is why it is unsurprising that 25 percent of NFIP claims and 1/3 of Federal disaster assistance come from outside of mapped floodplains).³

Flood Insurance Affordability

The aforementioned 2020 NAC report describes how the NFIP “inadvertently assists the wealthier segment of the population by serving only those who can afford flood insurance.” Although reforms in 2012 and 2014 did put all properties on the path to full risk rating, it also affected flood insurance affordability. Unfortunately, a long-term solution to affordability was not included in either BW–12 or HFIAA. However, through Risk Rating 2.0, we argue that in addition to making the program more equitable, it also will result in making flood insurance more affordable to those who are likely most sensitive to higher flood insurance rates, fixing the legacy rating approach which resulted in low-value homes paying too much and high-value homes paying too little. Additionally, ASFPF has identified three reforms that may have an impact on flood insurance affordability.

Over the past several years, another idea gaining traction is a program providing means-based premium subsidies to address flood insurance affordability. ASFPF is supportive of the concept based as long as it includes two provisions—that the subsidy is shown separate from the premium so that the policyholder better understands the underlying flood risk, and that the subsidy is paid for outside of the NFIP and therefore by taxpayers versus NFIP policy holders as the benefits accrue to society at large versus other NFIP policy holders. It seems appropriate that such a program would be inclusive of an equity standard that has been proposed by FEMA's National Advisory Council.

- ASFPF supports a needs based, equitable flood insurance premium assistance program. However, the subsidy should remain separate from the premium in order to properly communicate flood risk and it should be paid for outside of the NFIP as the benefits of the program are to society at large.

In 2014, to meet House PAYGO rules, there was a large surcharge imposed on nonprimary residences, small businesses and other nonresidential structures. The surcharge is neither risk-based nor need-based. Premium increases and surcharges

²“The Impact of Climate Change and Population Growth on the National Flood Insurance Program through 2100”. 2013.

³“FloodSmart Flood Facts”. Webpage accessed 3/14/17.

have led to a notable reduction in policies in force, declining from a high of 5.5 million to about 5.1 million today.

- ASFPM recommends the elimination of the PAYGO surcharge established in 2014 to improve flood insurance affordability and equity with private flood policies. This will take an additional cost burden off of small businesses.

A third reform that is presently being debated is the cap on flood insurance premium increases. ASFPM does not have a specific recommendation on a suggested rate cap; rather, we would remind the Committee that generally rate caps that are too aggressive (too high) reduce the glide path to actuarial risk rating and therefore could exacerbate the problem of flood insurance affordability, while rate caps that are lower could help with flood insurance affordability and give owners time to consider and implement rate reducing flood mitigation options.

The Private Flood Insurance Market

Since 2012, previous NFIP reforms have led to a robust private market for flood insurance. Reforms to stimulate more private market participation have worked as intended. ASFPM very much believes a strong NFIP can coexist with the private market offering flood insurance as long as both are on equal playing fields. In other words, neither the NFIP nor the private market should be at a competitive disadvantage. The result can be coverages that complement each other. For example, private insurers depend on NFIP maps and agree local floodplain regulations help all insurance by reducing risk, yet private policies do not have to include the Federal Policy Fee to help pay a share of the flood mapping and floodplain management costs. The wholly unfair PAYGO surcharge has allowed private policies to be written using FEMA rate tables and the private sector is profiting on the difference between the loaded NFIP policy (with surcharges and fees) and private sector policy that does not have to charge such fees. ASFPM further believes that with the increase in the number of private flood insurance policies, it is even more important that the NFIP continue to be widely available when the private sector no longer writes policies in an area due to the concentration of risk or claims.

In 2019, the mortgage regulators issued a final rule which directly conflicts with statute when it comes to what type of flood insurance policy qualifies to meet the mandatory purchase requirement. While rulemaking had gone on for some years, the “discretionary acceptance” approach appeared in the latest, final version with no opportunity to comment. The primary issue is that Congress mandated that private flood insurance policies that were sold to for properties to meet the mandatory purchase requirement had to have coverages and deductibles “at least as broad as” a NFIP policy. This means that such private sector policies must have a coverage similar to ICC, to provide resources to come into compliance with flood codes and have deductibles that aren’t too excessive—a cheap flood insurance policy does a property owner no good if the deductible exceeds their ability to pay. Yet the “discretionary acceptance” alternative would allow policies without these provisions. Such a loophole hurts property owners and will lead to greater dependence on Federal disaster assistance—contrary to the foundational goals of the NFIP. Additionally, the private flood insurance market that has grown rapidly the past 7 years has done so without the loophole being in effect.

- ASFPM recommends Congress eliminate the Lender regulators 2019 “discretionary acceptance” rule that allows lenders to decide whether to accept private policies not meeting the specific requirements set by Congress for private flood policies.

The private insurance industry uses FEMA flood maps in various ways: sometimes to calibrate their risk assessment models, and sometimes to determine basic eligibility of their private flood insurance product. Certainly the most impactful part of flood mapping for private industry is the identification of where the mandatory purchase requirement is in effect. Industry officials that ASFPM talks with all support the floodplain management efforts in a community that provides a meaningful program of risk reduction. Given that 100 percent of the Federal Policy Fee goes to mapping and floodplain management, it is only equitable that private policies help pay for these functions and that they are not just borne by NFIP policyholders.

- ASFPM recommends an equivalency fee, equal to the Federal Policy Fee, be assessed on all private flood insurance policies sold to meet the mandatory purchase requirement.

As private flood insurance becomes more widely and easily available, provisions must be made to ensure such policies can only be made available to meet the mandatory purchase requirement if the community participates in the NFIP. Why? For

thousands of communities in the NFIP, the primary reason for joining the program is the availability of flood insurance to meet the mandatory purchase requirement. As a requirement of joining, communities agree to adopt and enforce local floodplain management standards. As a result, floodplain management standards are the most widely adopted in the United States—exceeding the coverage of building codes, subdivision regulations and zoning. The adoption and enforcement of these codes, in turn, reduces future flood risk to the individual, businesses, communities, and taxpayers. ASFPM members understand that once you remove the incentive for joining (flood insurance availability) thousands of communities may rescind their codes, drop out of the NFIP, and rely on the private policies to meet needs of property owners without the administrative burden of adopting and enforcing local codes and the likely future result of more development in flood risk areas. Particularly susceptible to this are small communities with low policy counts and where more development will occur. As stated earlier in this testimony, most communities in the Nation already participate in the NFIP. And while the private industry is still emerging, let's be partners in persuading communities to comprehensively reduce flood losses. Finally, this fee has no cost to the private insurance industry.

- ASFPM recommends that when private flood insurance policies are sold to meet the mandatory purchase requirement, they can only be sold for that purpose within NFIP participating communities.

Finally, ASFPM is concerned about the availability of private claims and policy data for the purposes of floodplain management and flood mitigation planning and programs. For decades FEMA has provided these data to local and State officials to assist with substantial damage determinations, flood recover, flood mitigation grants, Community Rating System participation, and flood mitigation planning. There should be a requirement that private flood insurance providers share comparable policy data to State and local floodplain managers.

Other Flood Insurance Issues

Community floodplain managers often hear complaints about the NFIP centered around what is covered and what is not; and the inability to get additional coverages like living expenses as part of a NFIP policy. ASFPM has been impressed with FEMA's customer experience initiative after Superstorm Sandy with FEMA committing to improving the insurance product it sells. Yet FEMA is constrained by a cumbersome rulemaking process that can take years to complete.

- ASFPM recommends Congress give FEMA the flexibility to offer additional flood insurance policy options and make changes to existing options without the need for extensive rulemaking.

Consistent with ASFPM's overall philosophy laid out in this testimony, the roll-out of Risk Rating 2.0 should strive to do no harm to the floodplain management and flood mitigation elements of the NFIP. As the initial roll-out of the program has begun, and while recognizing the many benefits of Risk Rating 2.0, many of our members have expressed concerns about how this will impact floodplain management and flood mitigation. ASFPM has been engaging with FEMA to answer questions on how these changes will affect how floodplain managers assist property owners, how it will impact mitigation grant programs, and to ensure that tools and information is developed to address these issues. We urge the Committee's continued oversight to ensure that the roll-out of Risk Rating 2.0 recognizes and addresses the needs of all of the NFIP's partners and stakeholders.

Finally, for nearly 2 years, ASFPM has been engaging FEMA to address access to certain policy and other data that might be classified as personally identifiable information (PII). Previously, State and local floodplain and mitigation managers had had access to information such as claims data provided it was used for official purposes such as implementing local floodplain management codes or for mitigation planning. However, two events conflated to inordinately restrict these data—Inspector's General reports where some inappropriate uses of data were discovered (and uses that ASFPM would never support), and the implementation of FEMA's new PIVOT system and accompanying reporting tool which did not contemplate needing to provide these data to those involved in flood mitigation or floodplain management. Today, FEMA has implemented a cumbersome system where some States and communities cannot even agree to FEMA's legal agreement under which some of these data are provided. Further, it is the DHS Privacy Office—that has dictated this burdensome overall approach. Unfortunately, we are not optimistic that FEMA can solve this administratively on its own.

In Conclusion

Floods are this Nation's most frequent and costly natural disasters and the trends are worsening. The NFIP is the Nation's most widely used tool to reduce flood risk through an innovative and unique mix of incentives, requirements, codes, hazard mitigation, mapping, and insurance. At the same time, we understand the four main pillars of the NFIP are interconnected; and making significant changes to one pillar without thoughtful consideration of the impact on the other three can erode the program overall. The NFIP is a key tool in the toolbox that serves policyholders, taxpayers, and the public well.

PREPARED STATEMENT OF VELMA M. SMITH

SENIOR OFFICER, GOVERNMENT RELATIONS, THE PEW CHARITABLE TRUSTS

MAY 18, 2021

Chairman Brown, Ranking Member Toomey, and Members of the Committee, thank you for your invitation to share The Pew Charitable Trusts' (Pew) perspective on the reauthorization of the National Flood Insurance Program (NFIP). My name is Velma Smith. I have a Masters in Urban and Regional Planning, and I am a senior officer in Government relations with Pew's flood-prepared communities initiative.

Pew's flood-prepared communities initiative—like this Committee—has taken on one of these complex and truly difficult problems: the costly and common problem of floods and flooding damage. Our aim is to reduce the impact of flood-related disasters on the U.S. economy, communities, and environment. Pew applies a rigorous, analytical approach to improving public policy that prioritizes investments in flood-ready infrastructure, mitigates the impact of disasters, modernizes flood insurance, and promotes nature-based solutions to flooding.

The NFIP, now 50 years of age, has long been an essential component of our Nation's management of flood risk. While the program must be adjusted and reformed, we understand that Congress must consider fully the consequences of changes to a program that serves so many flood-weary communities across the country. That is why Pew thanks the Committee for starting this important discussion now in anticipation of a timely reauthorization prior to the program's expiration on September 30th.

Pew supports changes to the NFIP that will:

- keep flood insurance available to those who need it without asking taxpayers to subsidize risky development;
- help drive new development away from flood-prone areas, including areas that will be at high risk for flooding or even permanent inundation in the future;
- foster fixes or buyouts of problem properties, make significant new investments in mitigation action, and provide additional assistance to the most vulnerable communities;
- promote the conservation and restoration of natural resources that can help in flood management;
- accelerate the collection, dissemination, and use of information on flood risk; and
- ultimately, make the Nation better prepared for tomorrow's severe storms.

As the Committee considers changes to the NFIP, we believe it is critical to balance the multiple aspects of the program and remain focused on the fact that the program is much more than a vehicle to sell insurance. The NFIP was established, not just to provide insurance and to lower Federal disaster relief expenses, but also to communicate risk, improve disaster response, and enable local governments to make sound decisions about land use and development. The fixes the Committee considers, therefore, should recognize and address these multiple goals.

Flood Maps

First, let me touch briefly on a central component of the flood program: Flood Insurance Rate Maps (FIRMs) that determine who is covered by the program's mandatory purchase requirements and provide critical information for local communities, mitigation planners, and emergency responders.¹ Though the slow pace of map production and the information—or misinformation—conveyed through the mapping

¹ Association of State Floodplain Managers, "Flood Mapping for the Nation: A Cost Analysis for Completing and Maintaining the Nation's Flood Map Inventory", January 2020, <https://www.floodsciencecenter.org/products/flood-mapping-for-the-nation/>.

program may appear far less pressing than issues of rates and affordability, we would urge the Committee to consider how to support and improve this foundational aspect of the NFIP.

Flood maps and the studies that underlie the maps can help State and local decision makers steer public investment into areas least likely to flood during the lifetime of newly constructed infrastructure. Informed by maps, communities can construct critical facilities, such as hospitals, utilities, and emergency shelters outside of the most hazardous zones, thereby lowering future response and recovery costs. Maps can show areas of “residual risk” behind levees or dams that could be affected by overtopping or structural failure, identify areas that might be preserved as parks and natural areas to absorb floodwaters, help coastal communities plan sensibly for sea level rise, and pinpoint priorities for storm drainage improvements. But none of this is possible for communities that still lack updated maps or, even more commonly, rely on maps that give no clues to what the future of flood risk may be.

Flood map production is, in part, a matter of money, and Pew has for many years advocated for significant increases in the level of general appropriations for flood mapping. But map production can also be affected by process, including multiple levels of appeals and delays in map adoption and by the chosen metrics of success.² Right now, FEMA measures success in the program largely by the percentage of the Nation’s population living in areas with completed maps. Those numbers are indeed impressive, but it is also true that many of the more rural areas lack even the most basic information about risks. This data gap can mean that as those locales begin to experience development pressures, builders and investors will not be guided by risk information. The result, in too many instances, will be new construction of homes and businesses that become tomorrow’s NFIP problems.

Pew, therefore, urges the Committee to consider options for accelerating map production in underserved areas and to resist any changes that would add time and complexity to what is already a very lengthy map review and appeals process. We also support direction to the Agency to include additional data on future risks in new maps products as quickly as possible. This future risk information will be helpful not only to local developers and homebuilders but also to decision makers targeting new monies for infrastructure investments and upgrades.

Rates and Affordability

As Members on this Committee know, flood insurance rates have proven to be a key sticking point. There are those who see rates as too low, enticing people to build or live in risky areas. Others believe the opposite or expect to recoup every dollar spent on insurance in eventual claims payments. Given the chasm between these points of view, it may be useful to consider a bit of history and to proceed with caution on any initiatives to further lower rates across the board.

When the NFIP was started, its proponents were wary of flood insurance providing an indirect subsidy for development in risky areas.³ Nonetheless, they were driven by what, at the time, seemed like large Federal disaster expenditures, and they were compelled to find a way to assure that those already living in flood-prone areas could make some sort of down payment on future Federal assistance. The program’s drafters were cognizant of the fact that land use decisions and building practices affect flood risk and that those decisions are made, not at the Federal level, but by individual communities. They saw Federal flood insurance as a means of leveraging improved floodplain management by local governments to reduce overall risk.⁴

They assumed that a very limited number of communities would be at risk for flooding and that flood maps could be produced rather quickly and prove useful for long periods of time. They aimed for covering risks for the average “normal” year and allowed for borrowing from the Treasury for “extreme” events. At the same

²Federal Emergency Management Agency, “Adoption of Flood Insurance Rate Maps by Participating Communities”, January 2019, <https://www.fema.gov/sites/default/files/2020-07/fema-adoption-flood-insurance-rate-maps-participating-communities-bulletin.pdf>.

³See, for example, U.S. Task Force on Federal Flood Control Policy, “A Unified National Program for Managing Flood Losses”, House Document No. 465, 89th Congress, second session, August 10, 1966, <https://www.loc.gov/law/find/hearings/floods/floods89-465.pdf>.

⁴See, for example, Federal Emergency Management Agency, “A Chronology of Major Events Affecting the National Flood Insurance Program”, October 2002, prepared by The American Institutes for Research, The Pacific Institute for Research and Evaluation, and Deloitte & Touche LLP, <https://www.dhs.gov/xlibrary/assets/privacy-pia-mip-apnd-h.pdf>; and Michel-Kerjan, Erwann O., 2010, “Catastrophe Economics: The National Flood Insurance Program”, *Journal of Economic Perspectives*, 2010, 24(4): 165–86, <https://www.aeaweb.org/articles/pdf/doi/10.1257/jep.24.4.165>.

time, they seemed certain that there would be enough years with few storms to allow quick repayment of borrowed funds.

When Congress pressed ahead with rate reductions to attract more policyholders, it also assumed that the need for subsidies would diminish over time as local floodplain management improved and as older structures were leveled by storms or rebuilt entirely.

Some of these assumptions were on point. Others, with the benefit of hindsight, appear naive.

Today, we are beginning to understand that where it rains, it can flood and that even in communities that sit above a river or far from the coast, heavy rainstorms can overcome storm drainage infrastructure. We are also beginning to understand that flood risk is dynamic and that assessing risk must be an ongoing process. Now we see, all too clearly, that large events can follow on the heels of other large events, diminishing opportunities for building up financial reserves. We can also see that many at-risk homes and businesses have remained at risk for multiple decades, and that discounted rates that were once seen as temporary have endured.

Now, it seems, the space between the rock and the hard place that the program occupies has become tighter. Although \$16 billion of program debt to the Treasury was forgiven in recent years, experts see no realistic chance that the program will be able to repay, with interest, the currently owed \$20 billion plus.⁵

Therefore, to the extent that Congress makes no changes to the structure of the program but offers new risk rate relief to policyholders, you may run the risk of increasing the NFIP program's current financial shortfall and threaten its ability to pay claims. On the other hand, to the extent to which rates are perceived as too high, lower-risk policyholders may drop coverage, thereby increasing the pressure to raise rates on the remaining properties. In addition, as some policyholders pay off loans and, thereby, fall out of the group that is required to carry flood insurance, they may drop coverage as well. If those individuals suffer uninsured losses in the future, Congress will be pressed to offer other types of disaster relief.

Clearly, this is a tough problem to solve, and we recognize that adjusting the NFIP's rate structure is a delicate business, because of the way it impacts people's ability to live and work in places they love. As the Committee approaches this difficult issue, Pew offers the following considerations:

First, we suggest to the Committee that FEMA has taken step one on affordability—in the form of the recently announced Risk Rating 2.0 pricing methodology. We understand that there is considerable apprehension about the impact of these changes, but we see these updates as ones that remedy a basic unfairness built into the program. As Carolyn Kousky of the University of Pennsylvania's Wharton Risk Management and Decision Process Center states: "Right now, low-valued homes pay too much for flood insurance and high-value homes too little."⁶ With adjustments to the program's previous differential between base rates and additional coverage rates and a modernized approach to considering costs of repairs, Risk Rating 2.0 would address this unfairness. From FEMA's preliminary nationwide data, we estimate that Risk Rating 2.0 would actually lower insurance rates for more than 1.1 million policyholders nationwide. We urge the Committee to let this important initiative proceed.

Second, we know there is a desire to go beyond Risk Rating 2.0's changes to address affordability. On that point, we recommend that the Committee use the information provided in FEMA's affordability framework study to craft an affordability program that is carefully targeted to those policyholders that need it most.

Again, we caution that an overly generous program—especially one that is not tied to other program reforms—will continue to undermine the program's claims-paying abilities and simply hasten the date by which Congress will again be debating loan forgiveness or changes to the borrowing cap.

Pew believes the Committee should work to avoid an affordability approach that is administratively complex and costly. While we understand the desire to help those who are severely housing burdened, we would remind the Committee that the task of determining each policyholder's current income and assets as well as outlays for mortgage and other insurance payments would require extensive and potentially

⁵ U.S. Government Accountability Office, "High Risk List: National Flood Insurance Program", 2019, <https://www.gao.gov/highrisk/national-flood-insurance/why-did-study#t=0>; FEMA, Federal Insurance and Mitigation Administration, "Watermark, Fiscal Year 2021", First Quarter Volume 13, <https://www.fema.gov/sites/default/files/documents/fema-watermark-report-12-2020.pdf>.

⁶ Kousky, Carolyn, "Stopping Price Reform Won't Eliminate Flood Risk", *The Hill*, April 2, 2021, <https://thehill.com/changing-america/opinion/546158-stopping-price-reform-wont-eliminate-flood-risk>.

costly data collection. In addition, an affordability program focused solely on mortgage-holders may also overlook the needs of many low-income homeowners who do not currently carry mortgages.

To ensure that artificially low insurance rates do not encourage more risky development in flood-prone areas, Pew also recommends that the Committee consider clearly restricting any additional rate subsidies for new construction.

Third, we urge the Committee to ensure that any new affordability program compensates clearly for the price signals that new discounts convey. Too many individuals assume that a low insurance rate equals low risk; many will see a lowering of rates as confirmation of minimal risk. Where this is not the case, people should be fully informed and educated about their true risks. An affordability program should not feed flood complacency.

Finally, Pew recommends beginning a triage of the program's financial ailments by moving more vigorously to improve the floodplain management aspects of the program, including by accounting for future risk with respect to land use regulations. The program should also address the costly repeat loss properties and, at the same time, provide more robust mitigation funding and resources in order to lower risk, not just premiums. Additionally, we believe that a reformed program must provide the public with information that can help families and individuals make sensible and affordable decisions about where to live.

Flood Risk Disclosure

As many flood experts have noted, an understanding of flood risk is fundamental to preparedness and protection, but individuals frequently underestimate their own risk of flooding, the extent of the damage that flooding can cause, or both. Some may not realize that the standard homeowner's insurance policy does not cover flooding. Others assume that their chances of significant loss to a flood are remote or believe that Federal disaster assistance will allow for full recovery and restoration. Many do not realize that for those living in the 1-percent-annual-chance or 100-year floodplain, the chances of a flood occurring during the lifetime of a 30-year mortgage are roughly one in four, far greater than the risk for fire.⁷ Others mistakenly believe that if they reside outside of a flood hazard area, their chances of experiencing a flood fall to zero.

This lack of awareness or understanding can have devastating consequences for families and their property. Flooding can wreak havoc on what may have seemed like a sensibly balanced family budget. Flood victims, who may have lost their belongings, means of livelihood, cars, pets, or even loved ones to floodwaters can become trapped financially, unable to sell or to break a lease; they may be making rent or mortgage payments while flood damages force them to live elsewhere. They may have foregone flood insurance, simply because they had no means of recognizing their own flood risk.

Upfront disclosures about flood risk—available before financial commitments are made—could change those results. Informed about a structure's loss history, for example, homebuyers could consider alternative neighborhoods, purchase flood insurance, or investigate mitigation options, such as landscaping improvements, building elevation, or special placement of costly mechanical equipment. An informed buyer who has not yet finalized financing may be able to roll the costs of flood-resiliency improvements into a long-term loan that will protect the structure and lower insurance rates. For most, this would be much easier than facing a costly repair bill on top of a mortgage payment post-storm.

For renters, flood knowledge can allow for the same sort of informed decision-making. The individual with mobility issues may choose a safer location, for example. A renter with expensive computer equipment might opt for the second floor rather than the basement apartment. And, again, more individuals may decide that an insurance policy to cover loss of their belongings is a sensible safeguard.

Pew believes that buyers and renters need to have all the information necessary to make informed decisions on what is often their largest and most important purchase. Sellers and lessors should be compelled to share the information they know about past flood damages and claims, obligations to carry insurance based on previous access to Federal disaster assistance, and designation of a home as repetitive loss property, which can have serious implications for flood insurance rates. They should also be compelled to share the results of any elevation survey completed on the property. Such information can round out the broader picture of flood risk for

⁷See, for example, National Association of Insurance Commissioners, "Flood Insurance Basics", undated, <https://www.naic.org/documents/cnte-c-trans-read-wg-related-flood-insurance-basics-v4.pdf?modal>; and U.S. Geological Survey, "100-Year Flood—It's All About Chance", April 2010, <https://pubs.er.usgs.gov/publication/gip106>.

a given property, giving consumers the equivalent of the repair and accident history that has become standard for automobiles.

We were delighted to find broad agreement on this issue with groups such as the National Association of Realtors and the Natural Resources Defense Council. Further, such a proposal enjoys bipartisan support by the public. A Pew poll released in 2019 shows that three quarters of respondents support a single, national standard to ensure that potential homebuyers are aware if a property has flooded repeatedly and if that property is required to carry flood insurance.

Pew urges the Committee to direct FEMA to move quickly to develop national standards for disclosure of past flood losses by sellers and lessors and to ensure that those standards become a basic part of the NFIP program. We also support directing FEMA to make flood claims data, aggregated at block or census level, readily available to the public on its website.

Repeatedly Flooded Properties

Where should Congress begin the financial and mitigation triage? Pew believes that Congress must start with the long-standing but still growing problem of repetitive loss properties.

This subset of insured properties that flood over and over again has strained the program's finances for decades. In some years, repetitive loss properties account for as little as 1 percent of the program's policyholders but cover 25 to 30 percent of its claims.⁸ Since the 1990s, Congress, FEMA, the Government Accountability Office (GAO), and others have probed this imbalance problem, documenting multiple cases of properties repaired and rebuilt numerous times at the NFIP's expense.

In 2009, the Department of Homeland Security's Inspector General (IG) said that about one in ten repeatedly flooded homes had cumulative claims exceeding the value of the house.⁹ The IG also said the increase in new repeat loss properties was outpacing mitigation efforts by a factor of ten to one. At that time, the universe of these properties was estimated to be growing at roughly 5,000 per year. A 2016 report by Resources for the Future and the Wharton Risk Center notes that claims filed by repetitive loss properties run 5 to 20 percent higher than the average of claims overall.¹⁰ And as recently as 2020, the GAO again noted the growing number of nonmitigated repetitive loss properties—despite significant Federal expenditures on property acquisitions and other flood mitigation action.¹¹

The NFIP program currently allows for a more rapid escalation of rates for repetitive loss and severe repetitive loss properties compared with other premium-discounted properties. It also directs FEMA to prioritize mitigation assistance to such properties through Flood Mitigation Assistance grants and requires even more rapid rate escalation if an offer of mitigation assistance is refused. However, these are simply starting points to reducing the growth of properties that flood over and over.

In the 115th Congress, a House-passed bill included a mandatory deductible that would have required owners to shoulder more of the repair costs, and it also included a measure that Pew supports aimed at addressing the root causes of repeated flooding. The Senate version of this bill has been championed by Senator Tim Scott, working along with Senator Brian Schatz.

Inspiration for what was called the Repeatedly Flooded Communities Preparation Act came from work already being done. A few jurisdictions participating in FEMA's Community Rating System (CRS) were already conducting what have been called repetitive loss area analyses, using FEMA data to map and evaluate concentrations of repeated claims. Some appeared to be having real success reducing the number of unmitigated repetitive loss properties.

While such efforts could be sophisticated, they might also be as simple as using a paper map and a marker to look for patterns in the data, following up, as necessary, with field visits, and looking at options for identified flooding hotspots. The bill uses a specific number to identify the very small set of communities that would be required to participate, but it does not dictate specific outcomes. It directs FEMA

⁸Federal Emergency Management Agency, "Severe Repetitive Loss Property Locations in FEMA Region IV and VI", 2009, <https://kymn.net/wp-content/uploads/2018/08/FEMA.RepetitiveLoss.Southeast.pdf>.

⁹Department of Homeland Security, Office of the Inspector General, "FEMA's Implementation of the Flood Insurance Reform Act of 2004", March 2009, <https://www.oig.dhs.gov/assets/Mgmt/OIG-09-45-Mar09.pdf>.

¹⁰Kousky, Carolyn, and Erwann Michel-Kerjan, "A Look at 35 Years of Flood Insurance Claims", undated, <https://www.rff.org/files/document/file/RFF-Resources-191-FloodInsuranceClaims-0.pdf>.

¹¹Government Accountability Office, "National Flood Insurance Program: Fiscal Exposure Persists Despite Property Acquisitions", GAO-20-508, June 25, 2020, <https://www.gao.gov/products/gao-20-508>.

to set up rules and calls on communities to make progress mitigating these hotspots. The legislation also reflects the fact that progress for one community might look very different from progress in another.

Let me be frank. This modest proposal to press communities to deal with repeatedly flooded areas has drawn some criticism. On the one hand, some believe it too unambitious. A more straightforward approach would simply remove some of the worst properties from the NFIP program—perhaps after a certain threshold of claims has been paid. Others see it as too tough on localities. Local governments don’t want to be singled out as a problem for the NFIP; they have other high priorities to consider.

We believe that the legislation, however, is a true attempt to hit the sweet spot—a spot that tries to focus attention on a nagging and growing problem, a directive that acknowledges the difficulty of the problem and offers a good dose of flexibility for finding solutions even as it creates a new level of accountability.

We know that among the repeatedly flooded properties, there are older homes built long ago on filled wetlands, on the edges of stream, or in a narrow valley below a rapidly growing area whose parking lots and new construction are sending water flowing downstream. Among these may be neighborhoods plagued by frequent low-level flooding tied to undersized drainage ditches cleaned out far too infrequently. The solutions to flooding, in some cases, may not be in the hands of the impacted homeowners. The bill would compel communities to get serious about addressing such problems.

At the same time, the list of repeatedly flooded properties might also include apartment buildings, beach houses, or businesses where flood claim payments have never been and will likely never be directed into improvements to protect those structures from the next storm—even though such improvements might be possible.

Pew supports The Repeatedly Flooded Communities Preparation Act, and we are hopeful that the Committee will include it in its reauthorization legislation. In our view, this proposal recognizes the size and seriousness of the repeat loss problem but also recognizes the need for locality-by-locality solutions. It does not penalize the homeowner, who may or may not have any means of controlling the flood threat. It allows for multiple solutions. Overall, such legislation would foster thoughtful floodplain management and careful priority-setting by local governments—very much in keeping with the original intent of the NFIP program.

Investment in Mitigation

Pre-flood preparation, mitigation, and adaptation: To date, these have been the missing pieces of the NFIP puzzle—despite the fact that multiple studies have shown that mitigation pays for itself in the long-term.

The most widely quoted of these studies comes from the National Institute of Building Sciences (NIBS) Multi-Hazard Mitigation Council, a panel of experts in fields related to the building sciences. This group has completed numerous reviews of mitigation projects of various types, concluding over and over that investments in mitigation save money and in some cases lives.¹² These studies also show that the sooner mitigation actions are taken, the more the associated benefits will multiply. The amount of savings varies by type and by project, but overall, the numbers run in ranges from \$2 in savings per mitigation dollar invested to as high as \$11 saved per dollar invested.

As you know, there are existing mitigation programs attached to the NFIP. The Flood Mitigation Assistance (FMA) program and the Increased Cost of Compliance (ICC) insurance riders have been helpful, and my colleagues at the Association of State Floodplain Managers have proposed an important expansion of the ICC program. Even if the ICC program is altered to become more generous to policyholders and even if the amounts appropriated for the FMA program increase to meet the full demand for yearly project applications, the Nation’s huge mitigation gap would remain, however.

That is why Pew sees the State Flood Mitigation Revolving Fund Act, a proposal from Senators Reed, Kennedy, and Menendez as a solid approach for expanding

¹² National Institute of Building Sciences Multihazard Mitigation Council, “Natural Hazard Mitigation Saves: 2019 Report”, December 2019, <https://www.nibs.org/page/mitigationsaves>; and National Institute of Building Sciences Multihazard Mitigation Council, “Natural Hazard Mitigation Saves: Utilities and Transportation Infrastructure”, October 2018, <https://www.nibs.org/resource/resmgr/docs/NHMS-UtilitiesFactSheet.pdf>.

flood mitigation investment. It is a concept that is supported by over 120 national and local organizations from Florida to Minnesota to Texas to California.¹³

Modeled on the success of similar programs for wastewater treatment and drinking water, this approach would put a real emphasis on flood preparedness, allow the States to develop their own in-house institutional capacity in the field of mitigation, and help break the flood-damage-and-repair cycle that cripples so many communities.

Under the proposal, the States, which already have good experience in managing revolving loan funds, will be able to evaluate needs across communities and set priorities. Some communities would be given loans—to be repaid over time—rather than being faced with enormous “repair bills” that come due all at once following a storm. Other communities might need more assistance. Where incomes and economic circumstances dictate, States could offer grants rather than loans, and, as loan payments return or “revolve” back to the fund, more communities will be helped over time.

Overall, we see this proposal as one that will save lives, livelihoods, and money, and we hope it will become a central feature of the NFIP reauthorization this Committee moves forward.

Equity and Social Vulnerability

Related to the issues of premium affordability, but in many respects larger than that is the issue of equity and social vulnerability.

As FEMA’s Federal Advisory Council reminds us in their 2020 report to the Agency: “[D]isasters disproportionately affect those who are already socio-economically marginalized in a community, subjecting them to even greater depths of poverty.”¹⁴ Numerous studies provide evidence that disasters take a heavy toll on the well-being of those who are economically or otherwise disadvantaged—among them the elderly, the disabled, and those struggling to support their families. Without ready access to temporary housing or savings to repair homes and cars, many of these individuals will struggle for many months or years to recover from floods. Some will be permanently impacted. Many of you don’t need to read the studies, for you’ve met those constituents as they sheltered in temporary housing, waited desperate for word of modest disaster assistance, or returned to homes with mold-covered wall-board.

We know these most vulnerable families may be on your mind as consider how to reform the NFIP, and we believe there are opportunities to better serve these individuals and families through the insurance program.

First and foremost, we would remind the Committee that the current insurance law does not appear to directly authorize FEMA to consider poverty levels or other social vulnerabilities in the administration of its programs. Creating a program for rate affordability based on income would alter that, but there may be other actions that Congress should consider as well—policies that could draw on the data being made available through the Centers for Disease Control and Prevention’s Social Vulnerability Index,¹⁵ FEMA’s own National Risk Index,¹⁶ or the Environmental Protection Agency’s Environmental Justice Screening and Mapping Tool.¹⁷ Congress might consider authorizing, either permanently or on a pilot project basis, the use of these vulnerability factors in scoring or awarding of grants and technical assistance. We understand that the Reinsurance Association of America has also begun looking at overlays of disaster risk data and social vulnerability and is formulating ideas for promoting private investments into those areas most in need. Their proposals go beyond the issue of flooding but may be of interest as well.

The Committee might also delve into the extent to which current approaches to benefit-cost-analysis (BCA) may bias mitigation investment decisions against neighborhoods or homes of lower values; a reform bill may be able to shift considerations

¹³The Pew Charitable Trusts, “Pew Joins Organizations in Supporting Bill To Boost Flood Preparedness”, October 18, 2018, <https://www.pewtrusts.org/en/research-and-analysis/speeches-and-testimony/2018/10/08/pew-joins-organizations-in-supporting-bill-to-boost-flood-preparedness>.

¹⁴Federal Emergency Management Agency, “National Advisory Council Report to the FEMA Administrator”, November 2019, <https://www.fema.gov/sites/default/files/documents/fema-nac-report-11-2020.pdf>.

¹⁵Agency for Toxic Substances and Disease Registry, “CDC/ATSDR Social Vulnerability Index”, <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>.

¹⁶Federal Emergency Management Agency, “National Risk Index for Natural Hazards (NRI)”, <https://www.fema.gov/flood-maps/products-tools/national-risk-index>.

¹⁷Environmental Protection Agency, “EJSCREEN: Environmental Justice Screening and Mapping Tool”, <https://www.epa.gov/ejscreen>.

from property value to people, including equity and social vulnerability factors, for such evaluations.

On this point, we would note that when it comes to property buyouts, it may not be the FEMA cost analyses that create a barrier for low-income residents. FEMA adjusted its procedures several years ago to allow for BCA waivers for cases in which a property is within the designated flood hazard zone and the appraised value of the home is below a certain level.¹⁸ The waiver policy was based on an analysis of 11,000 structures acquired or elevated, which found that the average benefits for each project type are \$276,000 and \$175,000 respectively. This change makes it easier for projects seeking to buy lower-value homes to be deemed cost-effective.

The larger problem, however, occurs when a family is unable to accept a buyout offer because the appraised value of their home is not enough to enable them to find alternative, safe housing. To address this barrier, Congress might look to the buyout program run by the City of Austin, Texas or the State program used in North Carolina. In the case of Austin, the city works to help the flood-trapped lower-income families with procedures based on the Uniform Relocation Assistance and Real Property Acquisition Act (URA).¹⁹ URA provides for payments beyond appraised value in cases of mandatory buyouts. North Carolina has done something similar by providing localities with financing to help add funds to standard buyout offers in certain cases.²⁰

Looking Forward

Touching again on issues of mapping, I will finish by asking you to look to the future, pressing the Agency to change the program not only to supplement our current depictions of flood risk but also to promote floodplain management solutions that will result in lasting protection.

Though it can flood just about anywhere, the Federal Government long ago opted to use the line associated with a certain statistical construct of a flood—the imaginary 1-percent-annual-chance or 100-year flood—as the arbitrary marker of where flood insurance is required and where it is not.

As a statistical calculation, this line is drawn from data observed in past events, so it has been criticized as unduly optimistic and worthless in the face of possible climate change impacts. Indeed, it has been widely misinterpreted as the indicator of safe and not safe, though it is not. But, if an arbitrary line is needed to look at a single year's flood insurance policies, this line can, perhaps, serve that purpose.

The trouble we have been creating for ourselves, however, is that we use the very same line to make decisions with consequences that run much longer than a single year. The NFIP asks local communities to evaluate the potential flood impacts only for those activities that fall within that arbitrary 100-year line—a line that will undoubtedly move in the future. Though many structures will likely stand for decades if not centuries, we still make siting and building decisions based on this line that offers no real glimpse of the future.

We would ask the Members of this Committee to examine how the NFIP program might be changed to make better, more forward-looking decisions, how FEMA can be directed to provide communities with data and tools that tell a more nuanced story of evolving flood risk, and of how the program's basic land use regulations might be changed to consider and account for future risks. On this point, we would note that the Association of State Floodplain Managers and the Natural Resources Defense Council have a petition before FEMA that argues for changes to the long-standing and grossly outdated NFIP regulations on floodplain management. We applaud our colleagues for pressing this point, and we are hopeful that the Agency will engage in a comprehensive review of possible improvements.

In closing, I again thank the Committee for the opportunity to testify and for allowing The Pew Charitable Trusts to be a part of this important discussion. We look forward to working with all the Members of the Committee to improve and sustain the Nation Flood Insurance Program.

¹⁸ FEMA, "Memorandum to Regional Mitigation Division Directors Hazard Mitigation Assistance Branch Chiefs from David L. Miller, Associate Administrator, Federal Insurance and Mitigation Directorate", undated, <https://www.fema.gov/sites/default/files/2020-04/fema-bca-pre-calculated-special-flood-hazard-area.pdf>.

¹⁹ City of Austin, Office of the City Auditor, "Audit Report: Flood Buyout Program", February 2017, <http://www.austintexas.gov/edims/document.cfm?id=271149>.

²⁰ North Carolina Department of Public Safety, "State Awards Supplements to Local Governments for Buyout of Properties Flooded by Hurricane Matthew", October 15, 2019, <https://www.ncdps.gov/news/press-releases/2019/10/15/state-awards-supplements-local-governments-buyout-properties%C2%A0flooded>.

PREPARED STATEMENT OF REBECCA KAGAN STERNHELL

DIRECTOR, NEW YORK CITY OFFICE OF FEDERAL AFFAIRS

MAY 18, 2021

Chair Brown, Ranking Member Toomey, and other Members of the Committee, on behalf of the Mayor and the 8.6 million NYC residents, I thank you for having me here today to discuss the National Flood Insurance Program (NFIP) and its role in communities like New York City (NYC).

My goal today is to present a community perspective, one based on experience as a local government official and direct feedback from constituents. NYC has more than 520 miles of coastlines and riverbanks. Like so many other States and communities throughout this country, our riverbanks and coasts hold a dangerous beauty we must grapple with. The advent of sea level rise and rapid climate change is forcing us to reckon with our relationship to the water and the cities and communities we have developed next to it.

The Federal Government has a range of tools at its disposal to help manage flood, from macro solutions like large-scale resiliency projects to the more micro like the NFIP. The NFIP is a lifeline for property owners after a flooding event that can mean the difference between recovery and the loss of a critical asset.

Given the stakes the program has for so many, I want to focus your attention on four key areas as the reauthorization of NFIP is contemplated: affordability, mitigation, mapping, and other program alternatives.

Affordability

Flood Insurance affordability is already a large problem for households across the country as premiums continue to increase year over year. The challenge of affordability will only grow as climate change increases the intensity and frequency of flooding. For example, NYC's commissioned 2017 RAND¹ Study on flood insurance affordability found that flood insurance is a financial burden for 25 percent of owner-occupied households in the City, and for nearly two-thirds of extremely low-income households.

The COVID-19 pandemic has added an additional layer of complexity to the issue as millions of Americans lost their jobs, saw incomes reduced, and struggled to pay mortgages and rents. Though we are at the long awaited moment of the pandemic seemingly coming under control and the country opening back up, millions of Americans will now face staggering rent and mortgage arrears on top of existing mandatory expenses like insurance.

Further complicating matter is a program FEMA has recently undertaken to reform how rates are calculated ostensibly to better reflect risk based on a series of public and proprietary tools—"Risk Rating 2.0." This policy has recently been rebranded as "Equity in Action" but is anything but equitable. As it is currently designed, it will overhaul how premiums are calculated, causing flood insurance costs to skyrocket in many areas around the country, including in New York City's coastal neighborhoods. Many of these neighborhoods are among our last bastions of affordable home ownership, especially for communities that continue to experience the damaging legacies of racist redlining policies.

These rapidly rising premiums will force thousands to make the impossible choice between abandoning their insurance policies or cutting back on household necessities like food, utility payments, and school supplies, or even abandoning their homes altogether. That could trigger a Government-made foreclosure crisis in communities where many are already struggling to make ends meet especially after the COVID-19 pandemic.

The City urges Congress to ensure flood insurance remains affordable for the most vulnerable, by establishing means-tested financial assistance for the households that need it most; and providing grants for low- and middle-income households to allow them to retrofit their homes to decrease their vulnerability to flood risk.

The RAND report offers an instructive look at how an affordability program could be modeled. To start, RAND looked at what "affordability" meant, noting that, "[f]lood insurance adds to the cost of owning a home, and we frame the discussion of flood insurance affordability in terms of the ratio of home ownership costs to household income."² From this, the report utilized a metric called a PITI ratio (a ratio of mortgage principal and interest, property taxes, and property insurance (PITI) payments to income), that looked at the cost of owning a given home, not merely property value or income alone. This tool enabled researchers to see what

¹ https://www.rand.org/pubs/research_reports/RR1776.html, p. 27

² Ibid. at 23.

small changes could affect the ability of a person to stay in their home, whether it was a mandatory rate increase or even just additional fees.

The City believes this type of metric offers an opportunity to set national policy that is sufficiently sensitive to local and individualized conditions. Other options that utilize a percentage of AMI alone are too limiting. Though AMI is set to regional conditions, it is not honed enough; take for instance Manhattan and Brownsville in the same NYC AMI, or Center City and Fairhill in the same Philadelphia AMI. Moreover, using a metric of gross income ignores the reality of people's lives and unavoidable expenses like—taxes, mortgages, commuting expenses, homeowner's insurance, dependents and children—children are expensive.

The PITI ratio doesn't utilize all of these but it does provide a more nuanced look at "ability to pay" for the purposes of premium reduction affordability programs and grants for mitigation.

The City strongly supports rate reductions and grants to help address affordability over loans. While loans are often discussed to help homeowners cover the cost of mitigation investments, they remain a relatively unviable option for low- to middle-income households. Setting aside the ability to qualify for a loan, many low- to middle-income households will find even at 0 percent interest, loan repayments are out of reach and savings from mitigation activity will not be realized until after the loan is repaid.

The chart below illustrates some of the challenges with loans using a high NFIP premium—\$3,000, the national average for FY18—\$900, and the average for New York State for FY18—\$1,150. We assume a modest \$20,000 10-year 0 percent interest loan³ for home elevation which would yield meaningful (50 percent+) NFIP premium savings. We also assume 8 percent annual NFIP premium increases. Even though there is no interest on the loan and the homeowner successfully lowered their flood insurance premium through the work, the homeowner is still responsible for paying back the same amount or more than what was already deemed to be unaffordable to them.

Annual Premium	Mitigation Loan	New Annual Premium, Yr. 1	Annual Cost, Yr. 1	Annual Cost, Yr. 5
\$3000 High	\$20,000	\$1000	\$3000 (\$2000 loan + NFIP)	\$3360 (\$2000 loan + NFIP + increases)
\$900 National Average	\$20,000	\$450	\$2450 (\$2000 loan + NFIP)	\$2612 (\$2000 loan + NFIP + increases)
\$1150 NYS Average	\$20,000	\$650	\$2650 (\$2000 loan + NFIP)	\$2884 (\$2000 loan + NFIP + increases)

³According to various home improvement sites, the cost of elevating a home ranges from \$20,000–\$100,000.

Mitigation

The availability of a range of mitigation options is key to affordability puzzle. It also, by definition, buys down risk for the property owner and to the NFIP.

Currently, the NFIP provides few incentives for property owners to protect their buildings from flood damage and reduce their premiums, other than by elevating their buildings. While that option may be possible for some structures—it simply is not feasible in many areas of New York City and other dense urban environments. According to the RAND Study, 39 percent of buildings in the City's high-risk flood zones face impediments to elevation because they are on narrow lots or are attached buildings. Past efforts at pushing FEMA to identify mitigation alternatives to elevation have yielded limited results. The City believes that more needs to be done and supports provisions on urban mitigation alternatives in the current House reauthorization bill by Chair Waters.

To best evaluate these alternatives, FEMA and the public need to see where the drivers of loss are. Congress should mandate that FEMA collect data on the extent to which major items (i.e., boilers, HVAC systems) are driving losses to better target mitigation approaches for property owners. The current small premium reduction for elevating mechanical items above the Base Flood Elevation may undervalue its mitigation effect. In addition, other factors such as the type of construction (e.g., brick compared to wood, attached compared to detached, etc.) can play a significant role in whether a structure will suffer catastrophic or lesser damage, but the extent to which these factors may influence premiums under the new rating system remain is unknown despite their importance.

Furthermore, there are currently no options for homeowners with an X-zone policy who are ineligible for a Preferred Risk Policy (PRP) to reduce their premiums through mitigation. Since flood risk is growing in these areas due to climate change, FEMA should provide rating options for homeowners in these areas who invest in mitigation to help encourage expanded flood insurance uptake in the X-zone.

Community Level

Community level mitigation is also a critical part of lowering program costs and achieving greater affordability at scale. Two core elements of this are funding for infrastructure measures and changes to floodplain management practices.

NFIP and FEMA programs like BRIC, should fund projects that will increase the resiliency of American communities to the impacts of climate change. Funding should be allocated for coastal and riverine flood prevention infrastructure, and interior drainage system upgrades. In particular, investments in both large- and small-scale coastal protection projects (i.e., floodwalls, levees, gates, berms, road raisings, tide gates) and associated interior drainage system upgrades are needed. Additionally, coastal areas would benefit from resiliently reconstructed waterfront infrastructure such as bulkheads, esplanades and wharfs as well as new coastal resiliency projects that use nature-based features, such as dunes, wetlands, and living breakwaters.

Federal support of "Resilient Design" that anticipates future risks in new construction and substantial rehabilitations of buildings and infrastructure can go a long way in avoiding catastrophic loss. New York City is doing its part at the local level by reforming our zoning code to facilitate floodproof construction and by embedding a climate risk screen into all city capital projects with Climate Resiliency Design Guidelines.

Since Hurricane Sandy in 2012, NYC has repeatedly increased required flood protection levels in Appendix G of the building code. These strategic changes help ensure that new buildings and major renovations are better prepared to withstand extreme flood events. Simultaneously, NYC has developed Climate Resiliency Design Guidelines which provide an even higher standard of flood protection for City capital projects. These Guidelines go beyond building codes by using sea level rise predictions, the useful life of the structure, and maps of future flood risk to calculate building-specific resilient design criteria. The Guidelines were recently made mandatory through local legislation for all public buildings and infrastructure, and this law will help ensure that NYC's investments in public services are designed to withstand flooding and sea level rise for decades to come.

Just this past week the City passed new zoning rules tied to flood risk mitigation. The goal of the Zoning for Coastal Flood Resiliency (ZCFR) is to help buildings better withstand and recover from major disasters and sea level rise, which could lead to lower insurance costs.

Briefly, the ZCFR updates, improves, and makes permanent the emergency rules established in the wake of Superstorm Sandy. New and substantially rehabbed buildings in areas of the City that, by 2050, are expected to have a 1 percent chance

of a flood event in any given year, are now permitted to meet or exceed flood-resistant construction standards set by the FEMA or NYC's Building Code.

ZCFR lets buildings elevate or relocate important mechanical, electrical and plumbing equipment, or backup systems like generators, above the expected height of floodwaters. This can be done either within the building, atop of the structure, or on a separate platform. For example, a NYCHA complex in Lower Manhattan can construct an elevated mechanical building in its yard to address the needs of the campus while keeping equipment out of the path of damaging floodwaters.

In addition to ZCFR, the City has undertaken specific "Resilient Neighborhood" actions to further limit flood risk in three neighborhoods, including:

- In Gerritsen Beach, the establishment of a new Special Coastal Risk District, limiting future density and capping building heights at 25 feet above the potential height of floodwaters to more closely match the area's built character.
- In Old Howard Beach, zoning changes limit the construction of attached homes, which are harder to retrofit and elevate than detached homes because of their shared walls.

Mapping

Rate Maps

FEMA's flood maps are a snapshot in time. Development of the maps is currently a long process; and given the impacts of sea level from climate change, many maps are often outdated by the time they are finalized and adopted. Prior to the Preliminary FIRMs for NYC issued in December 2013, the City's flood maps had not been updated since they were first created in 1983. These outdated maps left many New Yorkers in the dark about their flood risk. At the time of Hurricane Sandy many NYC residents outside of the SFHA were unaware of the true flood risk to their property and therefore did not have an NFIP policy to help recover.

NYC ultimately appealed and won an appeal to Preliminary flood maps that FEMA released after Sandy due to modeling errors. Technical and process improvements are required to better map and reflect flood risk, including more regular map updates; and the use of more sophisticated modeling that better represents and communicates flood risk. As a result of the appeal, FEMA is updating the maps with more precise data and information. New preliminary flood maps, however, are not anticipated to be completed until 2024—41 years after our first maps.

As you think through the program going forward, we ask you to consider the role of maps and zones, especially if Risk Rating 2.0 is to become to be the metric by which rates are set.

Up until now zones have been critical for setting rates—but Risk Rating 2.0 rates are NOT based on zones, although the NFIP purchase requirements ARE based on zones. In effect there is a general metric telling a property owner they must carry a policy, however the rate they pay on that policy is not tied to that metric. This approach risks causing considerable confusion for residents about what the flood risk to their home actually is. The role of zones in the NFIP must be carefully thought out to ensure clear communication and limit confusion about a home's flood risk.

Future Flood Risk maps

Apart from the flood zone (potentially rate) maps, NYC, in partnership with FEMA, is soon to begin modeling future flood risk citywide for the 2050s, 2080s, and 2100. This effort will produce flood maps and the forward-looking time scales that planners and designers need, so that zoning and construction today are informed by our best understanding of future conditions that our built environment needs to be ready to withstand; this innovative project will not only provide New Yorkers with a new, necessary tool for resilient design, but will also provide a model that can be replicated elsewhere around the country.

Program Alternatives

Disclosures Congress should develop policy that encourages States to develop clear and transparent disclosure requirements in real estate around flood risk. Currently many property owners lack meaningful information about their flood insurance requirements and flood risk. Households considering their next purchase or rental should be aware of risk and cost implications they may face from flooding before closing on a property. Status within the NFIP is tied to the property, not an owner. Thus, it is also important to know a property's claim history when purchasing a home regardless of its location in a SFHA or not. To better facilitate information flow, Congress should require the NFIP to share a property's "file" that includes coverage dates and claim dates and amounts, stripped of any PII, to pur-

chasers with accepted bona fide offers to purchase a property. This will allow potential property owners to access full information about a property, including potential additional cost related to insurance or mitigation.

Increased Cost of Compliance

Increased Cost of Compliance (ICC) coverage, currently included in standard NFIP policies, allows for up to \$30,000 to bring a building into compliance with floodplain management codes. \$30,000 is not enough in most cases to come fully up to code or to a more resilient standard than the minimum requirements. Though supply chains are expected to eventually normalize, the current hitches in supply chains for construction materials have driven up costs dramatically. We recommend incrementally increasing ICC from \$30,000 to \$100,000, with an option for the policy holder to purchase more coverage.

In addition to increasing the amount of ICC, Congress should also expand eligibility for ICC or ensure FEMA uses extant authorities. Specifically, ICC is the only mitigation assistance available directly to homeowners, but it is only made available after a flood loss for substantially damaged or repetitive loss properties. The City proposes allowing ICC to ‘intervene’ before the property is designated a repetitive/severe repetitive loss property. In doing the program transforms a liability into an asset, by converting the property to low risk immediately. Congress should expand mitigation approaches other than elevation and expand ICC eligibility into properties moving into Severe Repetitive Loss status (i.e., filing their 4th claim of >\$5,000).

Definitions

The designation of a property as Severe Repetitive Loss has significant implications for property owners and communities. The current definition of a severe repetitive loss property (SRP) is one based on the number (4+) and value (\$5,000+) of claims for a property. The notable variable missing from this definition is time. There is no time horizon over which these 4 claims need to occur, meaning a property can be deemed high risk despite not actually costing the NFIP much in claims. It is not hard to conceive of a property that had 2 modest \$5,000 claims in the 1970s, one in the early 2000s, and another in 2021. Despite the fact that this property isn’t perpetually flooding, NFIP characterizes this home as severe repetitive loss and imposes higher rates, which given the nature of these designations is handed down from property owner to property owner.

Time needs to be added to the SRP equation. The current SRP definition is too narrow and too easily triggered, especially with the limited options for all properties to reduce risk and premiums. The definition should be reserved for the most at risk properties that are truly experiencing repeated catastrophic losses.

FEMA Grant Funding

Reforms are needed for FEMA’s Hazard Mitigation Assistance (HMA) grant program so these grants have more flexible and predictable requirements and spending caps to allow local governments to work with property owners in identify flood mitigation strategies, such as buyouts that meet the needs of the owner and community.

Spending caps for both elevation and acquisition are typically well below the cost it takes to elevate a home or purchase a property in NYC. Additionally, the grants do not currently allow for funding to spent on a household’s relocation expenses. We recommend that the FMA grant for acquisition of a residential property for purposes of flood mitigation be expanded to support “reasonable out-of-pocket expenses” for household relocation and rehousing. Consistent with the Uniform Relocation Act (24 CFR §578.83), reasonable relocation costs include but are not limited to: moving cost expenses, temporary rental or home ownership assistance based on the market value of a “comparable replacement dwelling,” closing cost reimbursement and transfer taxes, and legal and housing counseling services necessary to support relocation, particularly for low- and moderate-income households.

The grant process must also be made more flexible. Currently communities are required to submit a list of properties at the time of application. This requires each community to maintain a preexisting list of interested property owners, posing several challenges: (1) FEMA grant funding is not guaranteed so it could be years before the mitigation is funded and the ownership of the property may have changed; (2) difficult to garner property owner interest when it’s unclear when there will be funding and what will be funded.

WYOs Claims and Compensation

Recognizing FEMA has begun to address concerns about claim payments and claims reviews by adjusters with the NFIP Transformation Task Force, the City still sees room for a more consumer-oriented approach to claims review. Including re-

stricting the use of outside technical reports by WYO companies in the claims process and ensuring that final reports are prepared in accordance with local, State, and Federal laws. The City supports Nydia Velazquez's (NY-7) reauthorization legislation that ensures there is a focus on the flood survivor, by requiring protections for policyholders, such as a clear appeal process with the requirement that FEMA provide appeal determination in writing to the policyholder and limit final claim determinations to a set timeframe.

Relatedly, as the City is concerned about flood insurance affordability and the solvency of the NFIP, the City strongly urges FEMA to pursue the most accurate payment model for WYOs. WYO's are a key player in increasing NFIP coverage, but they also benefit from not underwriting any of the actual risk. Accordingly, the City feels the WYO compensation should be right-sized to actual expenses. Where it might be understandable for an agent to receive a 30 percent commission for the year they issue the policy, subsequent year renewals do not require the same customer acquisition costs or property evaluations. Because of the financial condition of the NFIP, we encourage Congress to look at the current compensation structure to ensure it aligns with actual work on policy issuance.

Thank you again for having me here today and I look forward to answering your questions.

PREPARED STATEMENT OF STEPHEN ELLIS

PRESIDENT, TAXPAYERS FOR COMMON SENSE

MAY 18, 2021

Good morning, Chairman Brown, Ranking Member Toomey, Members of the Banking Committee. I am Steve Ellis, President of Taxpayers for Common Sense (TCS), a national nonpartisan budget watchdog. Thank you for inviting me to testify at this hearing on reauthorizing the National Flood Insurance Program (NFIP). TCS has worked on flood and disaster related issues on behalf of taxpayers for our entire 26 years of existence and I've been involved in flood issues dating back to my days as a young Coast Guard officer dealing with the aftermath of the Great Midwest Flood of 1993. These are critical issues for taxpayers and the country needs smart public policy that protects people and property.

The timing of this hearing is notable considering the first named storm of the extremely active 2020 Atlantic hurricane season appeared on May 16th. The year included a total of 30 named storms, a record. This was on the heels of years of increasing billion-dollar disasters. The Congressional Budget Office estimates that hurricane winds and storm-related funding cost the U.S. economy \$54 billion annually including \$34 billion in expected annual economic losses to the residential sector. The expected annual cost to Federal taxpayers is estimated to be \$17 billion.¹

Taxpayers for Common Sense is allied with SmarterSafer, a coalition in favor of promoting public safety through fiscally sound, environmentally responsible approaches to natural catastrophe policy. The groups involved represent a broad set of interests, from free market and taxpayer groups, to consumer and housing advocates, to environmental and insurance industry groups.

For more than a decade the coalition has advocated reforms to Federal disaster policy and in the National Flood Insurance Program that ensure the program is smarter and safer for those in harm's way, the environment, and for Federal taxpayers.

Federal floodplain policy and management has enabled unwise development that ironically contributes to catastrophic events. For instance, the flood insurance program subsidizes construction in risk- and disaster-prone areas, making it economically "safe" to build in medium- and high-risk areas by removing the costs of such decision-making. Before Hurricane Katrina in 2005, the Federal flood insurance program never borrowed more than \$1.5 billion from the U.S. Treasury and loans were repaid with interest. Since the 2005 storms, the program has borrowed more than \$35 billion.

One other truism of disasters is that they have a disproportionate impact on poor and minority populations. In many cases these individuals don't have savings to rely on while they rebuild, they may have lost their transportation to work, and their place of business may have been destroyed as well. Because of historically discriminatory policies or a need for lower housing costs, these individuals are often situated

¹ Congressional Budget Office. "Expected Costs of Damage From Hurricane Winds and Storm-Related Flooding", April 2019. <https://www.cbo.gov/system/files/2019-04/55019-ExpectedCostsFromWindStorm.pdf>

in less desirable, more vulnerable, higher risk areas. They may not be able to repay loans made available after disasters or provide sufficient funds of their own to tap Federal programs.

On a cost-adjusted basis, billion-dollar disasters in the U.S. have increased from 2.9 per year at an average cost of \$17.8 billion in the 1980s to 16.2 disasters per year at an average annual cost of \$121.4 billion from 2016–2020.² The Congressional Budget Office puts it rather succinctly, “Climate change increases Federal budget deficits.” And that, “Investment by the Government or others in various types of mitigation or adaptation efforts could reduce the costs of climate change.”³

While it varies by situation and peril, we know that every dollar spent on mitigation can save as much as \$6 or more in post-disaster response.⁴

NFIP

It is important to understand the context of how the Nation got into the flood insurance business. After years of ad hoc disaster aid being meted out by Congress, the NFIP was established in 1968 to create “a reasonable method of sharing the risk of flood losses through a program of flood insurance which can complement and encourage preventative and protective measures.”⁵ The program was to make up for a perceived lack of available flood insurance. But even at that time Congress was warned that it was playing with fire. The Presidential Task Force on Federal Flood Control Policy wrote in 1966:

A flood insurance program is a tool that should be used expertly or not at all. Correctly applied it could promote wise use of flood plains. Incorrectly applied, it could exacerbate the whole problem of flood losses. For the Federal Government to subsidize low premium disaster insurance or provide insurance in which premiums are not proportionate to risk would be to invite economic waste of great magnitude.⁶

For 50 years, the flood insurance program has helped fuel a development boom in high-risk areas simply by making it more affordable to take on flood risk. And housing doesn’t occur in a vacuum. As areas develop infrastructure follows with roads, bridges, water, electric, and sewer; these all intensify along with residential development. The NFIP has exacerbated exposure to climate change. At the same time, it is negatively impacted by it. As storms increase in frequency, as sea levels rise, this increases the costs to the program. It also increases demand for disaster spending.

In a little over 15 years, NFIP has been forced to borrow nearly \$40 billion from taxpayers to pay off claims, so I think it’s pretty clear that this “tool” was not used expertly and that the waste issue has come to fruition.

NFIP has subsidized rates in the program virtually since its inception, regardless of need. FEMA estimates more than 25 percent of properties in the program pay subsidized or “grandfathered” rates, where the flood zone designation has changed.⁷ Even with the properties that are paying supposedly risk-based premiums, the fact that the program can borrow from the Treasury is a built-in subsidy. The Government Accountability Office (GAO) has documented large cross-subsidies, many of which benefit high-income homeowners.⁸ They found that over 78 percent of subsidized properties in NFIP are located in counties with the highest home values (the top three deciles), while only 5 percent of subsidized properties are in counties with the lowest home values (the bottom five deciles).⁹ This represents a real challenge to the program’s sustainability. To help address this, grandfathering should not be allowed for any new construction in the floodplain.

The best way to reduce the rate—for property owners and taxpayers—is to reduce the risk. It’s not about artificial rate caps that hide the real risk to people, but about

²National Oceanic and Atmospheric Administration National Centers for Environmental Information. “U.S. Billion-Dollar Weather and Climate Disasters (2021)”, <https://www.ncdc.noaa.gov/billions/>.

³Congressional Budget Office. “Budgetary Effects of Climate Change and of Potential Legislative Responses to It”, April 27, 2021. <https://www.cbo.gov/publication/57019>.

⁴National Institute for Building Sciences. “Mitigation Saves: Mitigation Saves Up to \$13 for Every \$1 Invested”, 2021. nibs.org/files/pdfs/ms-v4-overview.pdf

⁵P.L. 90-448

⁶U.S. Task Force on Federal Flood Control Policy. “A Unified National Program for Managing Flood Losses”, August 1966. P 17. <http://www.loc.gov/law/find/hearings/floods/floods89-465.pdf>

⁷Congressional Research Service. “National Flood Insurance Program: The Current Rating Structure and Risk Rating 2.0”, January 25, 2021. <https://fas.org/sgp/crs/homesec/R45999.pdf>

⁸Government Accountability Office. “Flood Insurance: More Information Needed on Subsidized Policies”, July 2013.

⁹U.S. Government Accountability Office. July 2013. “Flood Insurance: More Information Needed on Subsidized Properties”. (Publication No. GAO-13-607). Retrieved from: <http://www.gao.gov/assets/660/655734.pdf>.

finding ways to fund mitigation either at the property level or at the community level. If a property owner is unable to afford the premium, means-tested assistance outside the rate structure should be provided.

We have long called for means-tested premium assistance to help more homeowners obtain flood insurance while shifting away from property-based subsidies. There are a little more than 5 million NFIP policies, but there are well over 100 million housing units. To put the need for flood insurance into perspective, according to FEMA, after 2016's extraordinary heavy rainfall event in Baton Rouge, the average homeowner with flood insurance coverage got \$86,500 to rebuild their home, the average person without flood insurance got only \$9,100 in individual disaster assistance.¹⁰

This sadly demonstrates that many people who aren't required to buy flood insurance should. Even with protection from levees, floodwalls, or dams, there is a residual level of risk of flooding.

We strongly urge the Banking Committee to enact a 5-year reauthorization of the NFIP in order to get past the annual or even monthly fights.

However, there are several things not to do in reauthorization—such as a number of provisions that have been contemplated in a partisan discussion draft in the other chamber. These include a proposed repeal of the surcharge imposed by Grimm-Waters—a surcharge that was implemented to pay for the repeal of elements of Biggert-Waters. Without offsets for this repeal, more NFIP costs will be borne by taxpayers. This legislation also envisions halving of the cap on premium increases intended to bring some policyholders rates closer in line to their risk, which is also a step backward. It would go from 18 percent to 9 percent. Further the legislation redefines average historical loss year to exclude catastrophic loss years and misrepresent the true costs of the program. The average historical loss year is used to set premiums in an effort to try to ensure they help offset costs to taxpayers. Excluding catastrophic loss years does not eliminate past floods or their costs on communities and taxpayers. The House draft also waves the magic debt-cancellation wand without even reducing the \$30 billion borrowing limit—a ridiculously high amount.

As the Committee knows, FEMA has launched a new effort to better price actual risk for properties. The new program, Risk Rating 2.0, is supposed to start for new properties and policies in October and for existing policyholders next year. According to FEMA, they worked with public, private, and nonprofit organizations to incorporate more data and flood variables to determine actual risk to properties, and it will be updated annually. In theory, this will reduce some of the cross-subsidies that have plagued the program. In addition, FEMA predicts that 23 percent of policyholders will see an average decrease of \$86 a month and 66 percent will see an increase of less than ten dollars and another 7 percent an increase of less than \$20 per month. Four percent will see an increase of more than \$20 per month, but those are for high value homes in high-risk areas. This adheres to the existing rate caps.¹¹

This move to Risk Rating 2.0 coincides with long overdue updates to mapping efforts. It goes without saying that there have been enormous technological advancements in mapping and modeling since the program's inception 50 years ago. More advanced technology such as LiDAR, 3D mapping, and computing power enable much more accurate and predictive maps than what have been in use to date.

Speaking of additional data, FEMA's National Risk Index coupled with other data can be used to target mitigation funds to communities and property most at risk and most in need of assistance. By targeting this way, Federal funds and assistance from a range of agencies and programs can be used with an even greater return on investment and risk reduction than otherwise.

Conclusion

I want to thank you for inviting me to testify today. NFIP and related disasters are critical issues not just for their budget and taxpayer impacts, but for society as a whole. Federal policies must better promote realistic and responsible solutions to climate change including targeted investments that lift innovative solutions and reflect the needs and experiences of low-income and minority communities. The goal must be to develop risk management and mitigation strategies that enable communities, infrastructure, and industries to become more resilient, face less risk, and can better adapt to and mitigate future costs and damages of climate change.

¹⁰Taxpayers for Common Sense. "Weekly Wastebasket: Another Hurricane Season Begins", June 1, 2018. <https://www.taxpayer.net/infrastructure/another-hurricane-season-begins/>

¹¹Federal Emergency Management Agency. "Risk Rating 2.0 is Equity in Action", <https://www.fema.gov/sites/default/files/documents/fema-rr-2.0-equity-action-0.pdf>.

To that end, I urge the Senate Banking Committee to pursue solutions to these issues in a bipartisan manner as has been done in the recent past. In countless areas across Government, this has proved to be the only method to achieve durable and lasting solutions to our challenges. Thank you again, and I'm happy to answer any questions you might have.

PREPARED STATEMENT OF R.J. LEHMANN

SENIOR FELLOW AND EDITOR-IN-CHIEF, INTERNATIONAL CENTER FOR LAW & ECONOMICS

MAY 18, 2021

Chairman Brown, Ranking Member Toomey, and Members of the Committee, my name is R.J. Lehmann, and I am a Senior Fellow with and Editor-in-Chief of the International Center for Law & Economics. ICLE is a nonprofit, nonpartisan research center that promotes the use of law and economics methodologies to inform public policy debates. Working with a roster of more than 50 academic affiliates and research centers from around the globe, we develop and disseminate academic output to build the intellectual foundation for rigorous, economically grounded policy.

I have been an active observer of the challenges facing the National Flood Insurance Program (NFIP) for 18 years. In my former life as a business journalist, I was from 2003 to 2011 the Washington bureau chief of two major trade publications covering the business of insurance. That stint included covering the 2004 and 2008 NFIP reauthorization debates and, of course, the devastating impact of Hurricane Katrina in 2005. In 2012, I cofounded the R Street Institute, where I remained until joining ICLE 6 months ago. Among my duties at R Street was running the Institute's insurance policy research program, and I made NFIP reform a major part of my research focus.

I thank the Committee for conducting this hearing, its first in 4 years on the topic of NFIP reauthorization. It has been nearly a decade since Congress last approved a long-term reauthorization of the NFIP. The program remains in need of structural reform, and the series of short-term extensions on which it has relied for the past 4 years leaves many parties—homeowners, business owners, builders, lenders, realtors, insurers, and insurance agents—without the clarity they need to make forward-looking decisions. One hopes Congress will be able to reach agreement this session on legislation that provides that clarity, while also making the adjustments needed to address the long-term challenges this program faces.

The past year has given us all an up-close view of how Americans respond when faced with the realization of remote and nominally “unforeseen” catastrophic risks. But, of course, the COVID-19 pandemic was not unforeseen at all. Public health officials and catastrophe modelers have long known that a viral contagion of this sort was not only possible, but inevitable. The 1918 influenza pandemic was within the lifetime of some Americans. Much more recently, another H1N1 influenza spread as a pandemic in 2009; we were merely fortunate that it did not prove to be terribly deadly. And we have in recent years seen other coronaviruses like SARS and MERS reach epidemic levels abroad.

Similarly, there is nothing unforeseen about the challenges facing the National Flood Insurance Program. It was established more than 50 years ago to provide coverage that private insurers would not; to reduce the Nation's reliance on post-hoc disaster assistance; to provide incentives for communities to invest in mitigation; and to be self-sustaining.

What is now clear is that the NFIP has not been—and, as currently structured, cannot be self-sustaining. Since Hurricane Katrina, the program has been forced to borrow nearly \$40 billion from the U.S. Treasury. Reforms passed as part of the Biggert–Waters Flood Insurance Reform Act of 2012 were intended to place the program on a path toward long-term fiscal sustainability by phasing out explicit premium subsidies and shifting more risk to the private insurance, reinsurance, and capital markets. But some of those reforms were scaled back or repealed almost immediately in the Grimm–Waters Act, passed in 2014. And even with \$16 billion of the program's debt erased by Congress in 2017, the NFIP remains \$20.5 billion in debt to U.S. taxpayers as of the first quarter of Fiscal Year 2021,¹ with no feasible plan ever to repay that debt in full.

¹“The Watermark Fiscal Year 2021, First Quarter, Volume 13”, Federal Emergency Management Agency, p. 2. <https://www.fema.gov/sites/default/files/documents/fema-watermark-report-12-2020.pdf>.

Post-hoc disaster spending also continues to grow, with more than 90 percent of all federally declared disasters involving floods. And while the program has provided incentives for mitigation, by making cheap flood insurance available, it also has played a role encouraging development in flood-prone and environmentally sensitive regions. Moreover, due to the looming threat of climate change—which we know will drive both rising sea levels and more frequent and more severe precipitation events—it is more crucial than ever that Congress address the NFIP’s structural issues and the ways to correct its perverse incentives for where and how Americans live.

Structural Problems of the NFIP

At its inception in 1968, the NFIP was not designed as a risk-based program. Property owners in participating communities were charged flat rates, irrespective of the level of flood risk their properties faced. That design was intentional, as the overarching goal was to encourage take-up, particularly by residents of the riskiest communities.

Shortly thereafter, in 1973, the program was redesigned to account for risk with the introduction of Flood Insurance Rate Maps (FIRM) that assign properties to various risk-rated zones and assess premium rates commensurate with the flood risk faced by that zone. Federally related mortgages on homes in high-risk zones that face a greater than 1 percent annual chance of flooding—also known as Special Flood Hazard Areas or 100-year flood zones—are required to purchase flood insurance.

But exceptions to risk-based ratings were built into the FIRM process from early on. Properties that joined the program prior to the introduction of rate maps could continue to pay non-risk-based rates through what are known as “subsidized” policies, which historically were assessed rates that were only 45 percent of their true actuarial liability.²

Moreover, while the Federal Emergency Management Agency (FEMA) is required by statute to revise and update all its maps at least once every 5 years, mapping changes do not force rate changes for existing structures. These are treated as “grandfathered” properties, which continue to pay the rates assigned when their community joined the program or when its prior rate designation was finalized.

As a result, the NFIP has always taken in less in policyholder premiums than actuarial assessments would recommend. In the years just prior to Biggert–Waters, from 2002 to 2013, the Government Accountability Office (GAO) estimates the program collected \$11 billion to \$17 billion less in premiums than was actuarially prudent.³

Biggert–Waters and the subsequent Homeowner and Flood Insurance Affordability Act of 2014 (HFIAA) placed business properties and second homes on a glidepath toward actuarial rates, with annual premium increases that are capped at 25 percent, while rate increases on subsidized primary homes are capped at 15 percent. Biggert–Waters would have placed grandfathered properties on a glidepath to actuarial soundness with a rate cap of 20 percent, but HFIAA amended that provision such that it only takes effect if a grandfathered property’s map changes again in the future. If it does, the grandfathered property would see rate increases that likewise would be capped at 15 percent.

Were the NFIP actuarially sound, it would have the resources to sustainably administer the program—including marketing and claims-adjustment expenses—and pay all expected claims that fall within the ordinary distribution of potential outcomes. But the NFIP would still experience—and in recent years, has experienced—outsized claims events like Hurricane Katrina, Superstorm Sandy, and Hurricane Harvey that fall in the tail end of the probability distribution. Indeed, those three events alone account for the overwhelming majority of the \$40 billion the program has had to borrow since 2005.

Since Hurricane Katrina, the NFIP has made \$5.06 billion in interest payments to service its debt to the Treasury but has managed to repay just \$2.8 billion of principle. It is, by all accounts, completely infeasible that it will ever repay its debt in full. Indeed, in 2017, the Congressional Budget Office (CBO) estimated that,

² Bill Jones, “Biggert–Waters Flood Insurance Reform Act of 2012 Summary”, Nebraska Dept. of Natural Resources, February 2013. <https://agriculture.ks.gov/docs/default-source/dwr-floodplains/summary-of-the-biggert-waters-act.pdf?sfvrsn=ce3ffec1-0>.

³ “Forgone Premiums Cannot Be Measured and FEMA Should Validate and Monitor Data System Changes”, Government Accountability Office, GAO-15-111, Dec. 11, 2014. <https://www.gao.gov/products/GAO-15-111>.

under its existing structure, the NFIP is expected to post an average annual loss of \$1.4 billion.⁴

That the program has proven structurally unsustainable was foreseen by its creators. In 1966, Lyndon Johnson's Presidential Task Force on Federal Flood Control Policy warned Congress that creating a Federal flood insurance program "in which premiums are not proportionate to risk would be to invite economic waste of great magnitude."⁵

Congress could assess that the benefits to homeowners and business owners in flood-prone regions merit the cost of subsidies. Even if that were the determination, however, the program's existing structure largely functions not through express taxpayer subsidies, but by enabling cross-subsidies from inland NFIP policyholders to those in coastal regions. The CBO has found that 85 percent of NFIP properties exposed to coastal storm surge (properties classified as "Zone V") pay below full risk-based rates. Altogether, 69 percent of Zone V properties are grandfathered, 29 percent are subsidized, and 13 percent are both grandfathered and subsidized.⁶

In addition to subsidies flowing from inland policyholders to coastal policyholders, NFIP subsidies broadly flow from higher-income areas to lower-income areas. In 2013, the GAO reported that 29 percent of subsidized policies were in counties in the top decile of median household income and 65 percent were in counties among the top three deciles, while just 4 percent were in the bottom decile and 10 percent in the bottom three deciles.⁷

Should Congress determine that it does expressly want to subsidize property owners in flood-prone regions, those subsidies should properly flow directly from the taxpayers. Laying the burden on inland and lower-risk NFIP policyholders discourages take-up of flood insurance, at the margin, when the goal should be much broader take-up to close the protection gap. Moreover, to the extent that subsidies are necessary to protect at-risk populations from displacement, it would be proper to transition to an income-based voucher system, rather than the existing system of subsidies and grandfathering tied to when the property joined the NFIP.

Rising Waters, Rising Risks

Over the past 50 years, the NFIP has helped to shape the landscape, with significant impact on the country's built environment. In the first four decades after its passage, from 1970 through 2010, the number of Americans living in coastal counties grew by 45 percent and now comprises more than half the U.S. population.⁸ Nowhere is this shift more apparent than in my State of Florida. At the beginning of World War II, Florida was the least-populated State in the Southeast. As the recent 2020 U.S. Census figures confirmed, it is now the third most populated State in the Nation. The NFIP was not the sole driver of that growth, of course. Air conditioning also played a part. But by providing guaranteed and affordable coverage for the most common catastrophe risk facing property owners in a place like Florida, the NFIP has been a key enabler of the mass conversion of wetlands and barrier islands—nature's built-in defenses against tropical storms and flooding—into acres and acres of manicured lawns and suburban tract housing.

But even as Americans spent much of the past half-century moving to areas at greater risk of catastrophic flooding, we have begun to see how anthropogenic climate change will make that problem much worse. Global sea levels rose by 2.6 inches from 1993 through 2014 and are projected to continue to rise by an average of one-eighth of an inch per year for the foreseeable future.⁹ Projections for the 21st century anticipate sea level rise of between 20 inches, should we manage to make

⁴"The National Flood Insurance Program: Financial Soundness and Affordability", Congressional Budget Office, Sept. 1, 2017, p. 1. <https://www.cbo.gov/publication/53028>.

⁵Gary William Boulware, "Public Policy Evaluation of the National Flood Insurance Program (NFIP)", doctoral dissertation, University of Florida, December 2009, p. 14. <https://ufdc.ufl.edu/UFE0041081/00001>.

⁶"The National Flood Insurance Program: Financial Soundness and Affordability", Congressional Budget Office, Sept. 1, 2017, p. 1. <https://www.cbo.gov/publication/53028>.

⁷"Flood Insurance: More Information Needed on Subsidized Policies", Government Accountability Office, July 2013. <https://www.gao.gov/assets/gao-13-607.pdf>.

⁸Ross Toro, "Half of U.S. Population Lives in Coastal Areas (Infographic)", *LiveScience*, March 12, 2012. <https://www.livescience.com/18997-population-coastal-areas-infographic.html>.

⁹"Is Sea Level Rising?", U.S. National Oceanic and Atmospheric Administration, Feb. 26, 2021. <https://oceanservice.noaa.gov/facts/sealevel.html>.

sharp and immediate cuts to global carbon emissions,¹⁰ and six-and-a-half feet, should the Antarctic ice sheet break up.¹¹

And yet, even facing these challenges, there has been no slowdown in Americans preferring to build and live in flood-prone areas. A 2018 analysis of FEMA records conducted by *Governing* magazine found that 15 million Americans lived in 100-year floodplains, where current rules for federally related mortgages require the purchase of flood insurance. That was a 14 percent increase from the turn of the 21st century, compared with 13 percent population growth in all other zones.¹² Even more strikingly, a 2019 report by *ClimateCentral* looked at areas projected to have a 10-percent risk of coastal flooding by 2050. They found that, in eight coastal States, there were more homes built within this project 10-year flood zone than in all other areas.¹³ Development was twice as fast in the 10-year flood zone than outside of it in Delaware, Mississippi, New Jersey, and Rhode Island, while in Connecticut, it was three times as fast.

Losing land to the sea is not an entirely new phenomenon, of course. Sen. Kennedy's home State of Louisiana has lost more than 2,000 square miles of land since the 1930s. But the scale of land loss we may now face, combined with the surge in development in flood-prone areas, is new. In 2016, a piece in the journal *Nature Climate Change* overlaid anticipated population growth with projected sea-level rise of roughly 3 feet to 6 feet, finding that between 4.2 and 13.1 million Americans would be displaced by inundation.

The changing nature of flood risk makes it even more crucial that FEMA, as the NFIP's administrator, regularly update its Flood Insurance Rate Maps to keep up with changes on the ground. The evidence, however, is that the agency is failing to do that. A 2017 Department of Homeland Security Inspector General's report found that FEMA was up to date on just 42 percent of the NFIP's flood hazard miles, far short of a goal of 80 percent set in 2009, and that the agency had not properly ensured that "mapping partner quality reviews are completed in accordance with applicable guidance."¹⁴ In 2017, the CBO found that, of the 166 counties that produce more than \$2 million in average annual flood claims, half were using maps that were more than 5 years old.¹⁵

Sea-level rise and other impacts from climate change threaten to radically transform how we must deal with the risk of flooding. A 2019 study in *Nature Communications* had a grim projection about the frequency and severity of flooding and coastal storm surge: By the end of this century, today's 100-year flood events in the Southeast and Gulf Coast will be expected every 1 to 30 years. Today's 100-year events in New England and the mid-Atlantic can be expected every single year.¹⁶

It is inevitable that, in at least some locations, we will have to consider pulling back from the coasts and moving Americans to higher ground. But an important first step is to stop making the problem worse.

Baby Steps Toward Managed Retreat

"Managed retreat" is a controversial phrase, both because it connotes surrender in the battle against climate change and because it is taken to mean a radical realignment in the way we live. And yet, in some respects, managed retreat is long-standing policy. It is seen most clearly in FEMA's Hazard Mitigation Grant Program (HMGP), the Flood Mitigation Assistance (FMA) Grant Program, and Pre-Disaster Mitigation (PDM) Program, all of which execute buyouts of flood-prone properties,

¹⁰Carling C. Hay, et al., "Probabilistic Reanalysis of Twentieth-Century Sea-Level Rise", *Nature* 517 (Jan. 14, 2015), pp. 481–84. <https://www.nature.com/articles/nature14093>.

¹¹Robert E. Kopp, et al., "Evolving Understanding of Antarctic Ice-Sheet Physics and Ambiguity in Probabilistic Sea-Level Projections", *Earth's Future* 5 (Dec. 13, 2017), pp. 1217–33. <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2017EF000663>.

¹²Mike Maciag, "Analysis: Areas of the U.S. With Most Floodplain Population Growth", *Governing*, August 2018. <https://www.governing.com/gov-data/census/flood-plains-zone-local-population-growth-data.html>.

¹³"Ocean at the Door: New Homes and the Rising Sea", *ClimateCentral*, July 31, 2019. <https://ccentralassets.s3.amazonaws.com/pdfs/2019Zillow-report.pdf>.

¹⁴"FEMA Needs To Improve Management of Its Flood Mapping Programs", U.S. Department of Homeland Security Office of the Inspector General, Sept. 27, 2017, p. 3. <https://www.oig.dhs.gov/sites/default/files/assets/2017/OIG-17-110-Sep17.pdf>.

¹⁵"Age of Flood Maps in Selected Counties That Account for Most of the Expected Claims in the National Flood Insurance Program: Supplemental Material for The National Flood Insurance Program: Financial Soundness and Affordability", Congressional Budget Office, November 2017, p. 3. <https://www.cbo.gov/system/files?file=115th-congress-2017-2018/reports/53028-supplementalmaterial.pdf>.

¹⁶Reza Marsooli, et al., "Climate Change Exacerbates Hurricane Flood Hazards Along U.S. Atlantic and Gulf Coasts in Spatially Varying Patterns", *Nature Communications* 10:3785 (Aug. 22, 2019). <https://www.nature.com/articles/s41467-019-11755-z>.

which are then demolished, and the vacated land dedicated in perpetuity to open space.

While buyouts are likely to continue to be part of the solution to rising flood risk, there are serious questions about whether they could ever scale anywhere close to meet the scope of the problem. A 2019 report from the Natural Resources Defense Council found that, at the pace FEMA executed buyouts in the 30 years between 1989 and 2019, it would only be able to buy out another 115,000 properties by the end of the 21st century.¹⁷ For comparison, current projections are that as many as 13 million properties will be completely inundated by the year 2200.

Rather than tearing down the flood-prone properties that already exist, a more immediate approach would be to remove the incentives to build new ones. I authored a report last year that proposed doing so directly—by barring any new construction in 100-year floodplains from NFIP eligibility. Based on my review of NFIP claims data, had this policy been in place starting in 1980, the program's payouts between 1990 and 2019 would have been roughly 13 percent smaller, representing \$16.5 billion in savings.¹⁸

What I could not quantify in my research, but which is likely even more crucial to the pressing challenge of climate adaptation, is how many of those severely flood-prone properties would not have been built in the first place, but for guaranteed NFIP coverage. In some cases, property owners in such areas might turn to the emerging private market for flood insurance, but they would be assessed risk-based premiums that, in many cases, likely would be prohibitive.

Of course, an additional benefit of this approach is that, unlike phasing out subsidies, it does not lay any new burden on existing policyholders. Similar approaches can be found in the Coastal Barrier Resources System (CBRS), a 37-year-old program that bars Federal subsidies to development across a 3.5-million-acre zone of beaches, wetlands, barrier islands, and estuaries along the Atlantic Ocean, Gulf of Mexico, and the Great Lakes. Likewise, in Florida, the Legislature adopted a similar rule in 2015 that bars the State-sponsored Citizens Property Insurance Corp. from writing coverage for new construction located seaward of the State's Coastal Construction Control Line.¹⁹

But it is not enough simply to tell people where they cannot build; we must also tell people where they can. Many areas remain gripped by a serious housing affordability crisis caused by stringent land-use controls that make it excessively difficult to build new housing in places where people wish to live.

Therefore, in addition to the “stick” of removing the NFIP's incentives to build in flood-prone areas, I propose an additional “carrot” of Federal incentives for States that liberalize their land-use policies in areas of lowest flood risk.

Specifically, the Stafford Act currently requires that, when the Federal Government provides post-disaster relief to repair, restore, or replace damaged facilities, State, and local governments are responsible to pick up 25 percent of the cost. I propose that providing for dense housing in the lowest-risk flood zones—those classified as 1-in-500-year zones, or Zone X and Zone C in the current mapping system—would enable States to “buy down” the local cost share. For example, if a State were to abolish single-family zoning in the lowest-risk flood zones—e.g., allowing construction of accessory dwelling units and up to four-family homes, by right—the Federal Government's cost-share for post-disaster recovery would rise to 80 percent or even 85 percent. This would begin the process of ensuring that, as rising seas force more Americans to move to higher ground, there will be sufficient housing stock to absorb them.

Other Considerations

- I mentioned earlier that it would be proper to transition the current subsidies to an income-based voucher system. An important element of such a system is that policyholders should be made aware of the full risk-based cost of flood insurance. The same applies to current subsidized and grandfathered policyholders. Any NFIP policy with rates that are less than the full risk-based cost should disclose to policyholders what that cost would be. Similarly, a complete flood history should be made available to buyers as part of all real estate closings.

¹⁷ Anna Weber and Rob Moore, “Going Under: Long Wait Times for Post-Flood Buyouts Leave Homeowners Underwater”, Natural Resources Defense Council, Sept. 12, 2019. <https://www.nrdc.org/resources/going-under-long-wait-times-post-flood-buyouts-leave-homeowners-underwater>.

¹⁸ R.J. Lehmann, “Do No Harm: Managing Retreat By Ending New Subsidies”, R Street Institute, February 2020. <https://www.rstreet.org/wp-content/uploads/2020/02/195.pdf>.

¹⁹ Jane Smith and Michelle Quigley, “Along the Coast. A Line in the Sand”, *The Coastal Star*, Aug. 30, 2017. <https://thecoastalstar.com/profiles/blogs/along-the-coast-a-line-in-the-sand>.

- Many of the implementation questions that surrounded Biggert–Waters’ provisions permitting private flood insurance to satisfy mandatory purchase requirements have, in recent years, been resolved by State authorities and the Federal lending regulators. One additional point of clarification this Committee could provide is to determine whether consumers who move from the NFIP to private flood insurance and then maintain continuous coverage can later return to the NFIP at the same rate as if they had remained with the program all along. This would protect consumers if, for example, after switching to a private policy, the private insurer raised rates or exited the market.
- Some have proposed forgiving the NFIP’s current \$20.5 billion debt to the Treasury. Should Congress opt to do so, the program’s existing \$30.425 billion borrowing authority would be far too large to offer any meaningful check. Congress should instead simply set the borrowing authority cap 1 percent of the NFIP’s total insurance in force. Based on its current total of \$1.3 trillion, this would mean the NFIP could borrow up to \$13 billion without needing further authorization.

With that, I would be glad to answer any of the Committee’s questions.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR SINEMA
FROM CHAD BERGINNIS**

Q.1. Last year, the University of Arizona led and published a study in the *Journal of Environmental Economics and Management* about the National Flood Insurance Program. The study found that Black and Hispanic homeowners are more likely to live in high-risk flood zones and could be disproportionately affected by reforms to the program. What do you make of this study, and how should it inform ongoing efforts to reform and improve NFIP?

A.1. Response not received in time for publication.

Q.2. Avoiding a lapse in the National Flood Insurance Program is an important policy goal, but we must strive for a long-term reauthorization of the program. What are the negative consequences for policyholders associated with short-term reauthorizations?

A.2. Response not received in time for publication.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR SINEMA
FROM VELMA M. SMITH**

Q.1. Last year, the University of Arizona led and published a study in the *Journal of Environmental Economics and Management* about the National Flood Insurance Program. The study found that Black and Hispanic homeowners are more likely to live in high-risk flood zones and could be disproportionately affected by reforms to the program. What do you make of this study, and how should it inform ongoing efforts to reform and improve NFIP?

A.1. Academic research and other studies that help us better understand how demographics overlay with risk can make an important contribution to debates regarding policy changes to the National Flood Insurance Program. The University of Arizona study is an important addition to the literature on this topic.

That study examined one region in south Florida and looked at home purchases dating over a 5-year period, examining a range of factors and concluding that “low income and minority residents are more likely to move into high risk flood zones.” The study also attempted to estimate the likely NFIP premium levels associated with different properties and project the price differences that would be experienced by homeowners under certain changed pricing scenarios, including loss of assumed pre-FIRM subsidies, loss of Community Rating System (CRS) discounts, and loss of assumed grandfathering subsidies.

In thinking about the conclusions drawn in this report, it is important to recognize that the analysis was completed prior to announcements regarding Risk Rating 2.0 and that none of the reform scenarios studied are currently under consideration. To the contrary, the proposed Risk Rating 2.0 methods, in many instances, will lower rather than raise the rates now being paid by certain pre-FIRM property owners.

Rather than focus solely on this one study, then, we would urge the Committee to consider the important issues of equity in flood protection by using information in FEMA’s own Affordability Report. That report, prepared in collaboration with the Census Bureau and with direct access to NFIP pricing and policy take-up in-

formation, offers what may be the clearest picture to date of the demographics of NFIP policyholders.

FEMA's analysis shows that, with some notable exceptions, residents of flood zones in most States tend to have incomes lower than those of residents who live outside of designated flood zones. The study also finds that within flood zones, a greater percentage of lower income households go without flood insurance, compared with higher income families. This finding may not be surprising given the overall statistics on flood insurance penetration rates and the fact that the law's mandatory purchase requirement drops off once a mortgage is paid down to \$5,000. According to FEMA, it "... suggests that policymakers should pay particular attention to the affordability of flood insurance for households that currently do not have flood insurance but face flood risk."

While the study itself does not offer a specific prescription for making flood insurance more affordable to lower-income families, it offers Congress a basis for comparing the advantages and disadvantages and the likely range of costs for various approaches, including approaches

based on means-testing, percentage of insurance coverage, or measures of housing burden. This report, as well as the 2016 Government Accountability Office report on the same topic, may be helpful to the Committee as it considers options for helping families without the financial means to insure and protect themselves.

As I noted in our testimony, Pew is hopeful that Congress will choose an affordability approach that is carefully targeted to those most in need and structured to avoid costly and complicated data collection requirements. We also urge the Committee to assure that any discounted rates are accompanied by clear information about actual risks and that insurance assistance is complemented by mitigation assistance to allow property owners and communities to reduce their flood vulnerabilities.

On this point, we applaud the recent announcement by FEMA that it will begin making Individual Assistance (IA) available to disaster victims for specific mitigation efforts, such as elevation of utilities. We were also pleased to see that the President's proposed budget includes possible new funding for an affordability program. A general appropriations approach to funding this program would eliminate the potential for new cross-subsidies within the program. We anxiously await the details of the Administration's announced legislative proposal on this issue, and we hope to engage with the Committee when the proposal is released.

Q.2. Avoiding a lapse in the National Flood Insurance Program is an important policy goal, but we must strive for a long-term reauthorization of the program. What are the negative consequences for policyholders associated with short-term reauthorizations?

A.2. An actual lapse in the authorities for the National Flood Insurance Program could directly affect real estate transactions and the payment of claims for existing NFIP policies. A useful discussion of the possible impacts is found in a Congressional Research Service report updated last October. "What Happens If the National Flood Insurance Program (NFIP) Lapses?" notes that flood insurance contracts entered into before the expiration date would

remain in effect to the end of their terms, but no new flood insurance policies could be written. In turn, this could affect the functioning of real estate markets, because lenders would still be obligated to assure coverage on mortgages for homes located in a designated flood zone. In addition, because a lapse would also lower the program's borrowing authority, there could be a lapse or delay in claims payments if a major flood event occurred during a time when FEMA was not collecting additional premiums.

For the most part, Congress has in the past avoided actual lapses in the program but frequently resorts to multiple short-term program extensions, with many coming only a matter of days or hours before the program authorities would expire. Each of these potential lapse occasions can cause disruptions to the program, as lenders, real estate professionals, FEMA, and the Write-Your-Own insurance agents must evaluate and prepare for the implications of a lapse. Policyholders may not be directly aware of such situations but may experience some level of delay or confusion with insurance purchase or servicing or with real estate transactions and mortgage closings.

Pew urges Congress to resist the temptation to continue a series of short-term extensions of NFIP.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR SCOTT FROM VELMA M. SMITH

Q.1. This is a deeply important topic to my home State of South Carolina, where I spent over 15 years in the insurance business helping to write flood insurance policies, responding to flood insurance claims, going to homes that had been flooded and watching the families try to piece their lives back together.

One issue that continues to frustrate me is that we have not yet—as a Committee or a country—come up with a way to address repeatedly flooded properties; homes and businesses that time and again see flood waters rise, putting people in harm's way.

Within the NFIP these properties represent about 1 percent of the policies, yet make up approximately 30 percent of the claims.

In the last two Congresses, I have authored a bipartisan proposal, the Repeatedly Flooded Communities Preparation Act, which would offer a community response to lowering flood risk in these problem areas.

This is not a one-size-fits-all approach but a community by community approach. Some communities need voluntary buyouts, others need drainage improvements, while others may simply need to clean out storm drains regularly.

Can you comment on the problem of repeat loss, the community approach to addressing it, and what policymakers can learn from work already being done around the country?

A.1. The repetitive loss issue has some very big numbers attached to it, numbers that have plagued the financial stability of the program for decades. The numbers, of course, change from year to year, but, as you note, in some years, estimates have shown as little as 1 percent of the properties insured accounting for as much as a third of claims. According to the Government Accountability Office, the NFIP has paid out more than \$22 billion in cumulative

claims for repeatedly flooded properties—more than the current debt of the program. The Agency itself has cited the repetitive loss problem as “the single most important factor that affects the stability of the National Flood Insurance Fund.”

But the good news is that there are success stories—stories in which communities have looked carefully at those neighborhoods hit hard by major disasters or vexed by chronic, recurrent flooding and worked to diagnose and solve those problems. In some communities, fixes have been put in place in relatively short order. More frequently, as in the Onion Creek area of Austin, Texas, mitigation has been a slow but steady journey.

Sometimes, as the question indicates, buyouts are the answer, as in Austin; Augusta, Georgia; Nashville, Tennessee; Tulsa, Oklahoma; Sayreville, New Jersey; Charlotte-Mecklenburg, North Carolina; and a host of other towns and cities. In numerous instances, such buyouts not only eliminate the threat to life and property but also provide local open space amenities. In a small southeastern community in Minnesota, for example, where there had been more than 40 years of flooding with loss of life that community protected its citizens by buying out 14 homes and one business to create a local park.

In some communities, solutions will be harder to find and implement than in others; decisions may be painful, and the costs for correcting mistakes of the past and confronting the challenges of climate change can be high. Many communities have addressed their problems with Federal dollars from programs ranging from FEMA’s Hazard Mitigation Grant Program or Pre-Disaster Mitigation funding to the Department of Agriculture’s Natural Resources Conservation Service Emergency Watershed Protection—Floodplain Easement program or the Department of Housing and Urban Development’s Community Development Block Grant program. A good number of States and communities also use their own financial resources to better protect those areas that are prone to repeat flooding.

As you know from South Carolina’s own experience, the answers are turning out to be all of the above: buyouts, storm drainage improvements, home elevations, living shorelines, improved land use regulations, and sea walls. That is why we think it is sensible that your legislation doesn’t dictate answers. It requires action and effort. Paired with new funding through a revolving loan program as well as other grant resources, this initiative could begin to reverse the troubling trends on repeat loss.

Pew strongly supports the legislation that you and Senator Brian Schatz, formerly a Member of this Committee, have championed. We believe it recognizes the seriousness and the complexity of the problem. It also builds on the experience and successes of communities that have begun to address what might be considered their flooding hotspots. By compelling more communities to focus attention and resources on the problem, your legislation will save taxpayer monies and help flood victims break free from troubling and dangerous cycles of flood loss.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR SINEMA
FROM REBECCA KAGAN STERNHELL**

Q.1. Last year, the University of Arizona led and published a study in the *Journal of Environmental Economics and Management* about the National Flood Insurance Program. The study found that Black and Hispanic homeowners are more likely to live in high-risk flood zones and could be disproportionately affected by reforms to the program. What do you make of this study, and how should it inform ongoing efforts to reform and improve NFIP?

A.1. I am not familiar with this exact study, although your framing of it comports with what we see in neighborhoods in New York and many other places across the country. “Where We Live NYC5”, New York City’s fair housing plan, states “Emerging research suggests that the proportion of Black and Hispanic homeowners within New York City’s neighborhoods exposed to reoccurring flooding risks is increasing, suggesting that the impacts of flooding could be borne disproportionately by people of color in the future” (p.136). Decades of racist redlining policies and exclusionary zoning have shifted minority and lower income families (often times one in the same) into less desirable areas, including those that are more vulnerable to flooding and with lower levels of infrastructure investment.¹ As a result, these property owners face not only repeat flooding events but the resultant increased flood insurance rates as well.

Given this understanding, it is critical that the NFIP rate structure be affordable and sensitive to economic realities. Congress needs to enact affordability programs to ensure everyone can afford a policy, as well as mitigation grants to help households retrofit to protect the structures against flooding. As outlined in my written and oral testimony, the City believes an affordability program utilizing a metric like the PITI ratio offers an opportunity to set national policy that is sufficiently sensitive to local and individualized conditions. Other options that utilize a percentage of AMI alone are too limiting and loans quickly become unrealistic for the individuals they are intended to help.

Q.2. Avoiding a lapse in the National Flood Insurance Program is an important policy goal, but we must strive for a long-term reauthorization of the program. What are the negative consequences for policyholders associated with short-term reauthorizations?

A.2. There are consequences for both policyholders and for the NFIP itself. For the NFIP, the off-again/on-again nature of reauthorization means it is forever selling an unstable product to policyholders. One year a household might have flood, the next year they might have no coverage for a period of time as Congress lets it lapse while they work out reauthorization. Who would want to buy such a product when a more stable one is available in the private market? Congress does the NFIP no favors in issuing short-term reauthorizations. While the idea of regular reauthorizations certainly affords Congress a chance to look at and review the program, it has become essentially meaningless and toothless in terms of motivating Congress to act. The market failure that created the

¹ New York City’s Floodplain by the Numbers indicates that more than half of the population living in NYC’s floodplain identifies as Black, Hispanic, or Asian.

NFIP remains decades later, artificial reauthorization deadlines do not yield meaningful policy/programs reforms in the current political dynamic, and the instability creates needless chaos for the NFIP, its staff, and—most importantly—policyholders. Congress should make the program permanent or reauthorize for 10–20 years, requiring that the program be revisited for reforms every 5 years.

Specifically for policyholders, the churn of short-term reauthorizations create problems in implementing ideas like mitigation credits, loans, and affordability programs. As discussed in the previous question, the unavailability or over-complexity of these can lead to NFIP being increasingly unaffordable especially for LMI households. In households with busy working parents, who has the time to sort through flood insurance turning on and off, affordability programs coming on and off, recertifying information, trying to seek advice only to find program staff aren't available? Stability in the program begets stability for policyholders. Pairing stability with affordability tools will help ensure policyholders remain in the program and NFIP is viewed as something worth purchasing. The longer the program goes without an affordability program, the greater the burden placed on policyholders as their rates rise, potentially resulting in NFIP policies that are too expensive for the policyholder. Without changes, these policyholders (especially those in areas without mandatory purchase requirements) may choose to drop their policies and go uncovered, which, as we know, is a substantial risk.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR SINEMA FROM STEPHEN ELLIS

Q.1. Last year, the University of Arizona led and published a study in the *Journal of Environmental Economics and Management* about the National Flood Insurance Program. The study found that Black and Hispanic homeowners are more likely to live in high-risk flood zones and could be disproportionately affected by reforms to the program. What do you make of this study, and how should it inform ongoing efforts to reform and improve NFIP?

A.1. The study should absolutely be part of the data informing the Committee on reauthorization and reform of the NFIP. Along with studies from the GAO, the Wharton Risk Management and Decision Processes Center, First Street Foundation, and others. As I mentioned in my testimony the GAO has found that inherent subsidies in the NFIP (Pre-FIRM and grandfathering) predominantly benefit the well off at the expense of the less affluent. That is why one of the reforms that TCS advocates for is a shift from property-based subsidies to means-tested assistance. This shift would better target Federal assistance while getting more people insured because not enough Americans are insured.

Turning specifically to this University of Arizona study, it is necessary that the debate around reauthorizing NFIP incorporates the connections between race, pricing, and the enrollment rate into the program. Decades of policies have set many Black, Hispanic, and other people of color back in terms of economic and social mobility. Today, policymakers need to take an active role in drafting policy

that incorporates equity into the system. We are very fortunate to have the research that can identify potential complications in price reforms as well as provide policymakers with empirical data to guide them in the decision making process.

There are many factors, such as affordability and proximity to employment, that influence where people choose to live. The authors illustrate how people are generally risk-adverse and want to avoid flood risk. It also discovers that that changes in premium pricing may be a costly solution to remove people out of high-risk flood areas because it would leave the most vulnerable Americans, those who cannot afford to leave their homes, in these at-risk communities paying a higher premium. This obstacle needs to be addressed. Flooding can eradicate a lifetime's worth of hard work and savings; people lose their homes, their jobs, and become displaced. This fact is more pronounced in low-income communities that lack savings and resources to recover from flooding. If the data points to Black and Hispanic homeowners being disproportionately affected by premiums priced on the actual risk of flooding, then programs should be put in place to ensure that they have the ability to move to lower risk areas and get the protection they need at a price they can afford. The authors point to the benefits and success of the NFIP grandfather clause and the series of other price discount programs, but these alone are not a solution. They do not remove the risk of flooding, they simply shift the financial cost. At the same time subsidized homeowners will continue to bear the risk of physical, emotional, and much of the financial trauma associated with flooding. The best way to reduce rates is to reduce risk, which is why TCS supports robust investments in mitigation for both communities and individual homeowners.

Congress must decide what they want the mission of NFIP to be, and how they want to carry it out. NFIP is a dominant source of flood information for homebuyers. Yet, at the time the paper was written, 66 percent of flood maps had not been updated. Without consistent funding, all participants in the housing market are denied the tools they need to make informed decisions. A true multifaceted approach for NFIP with premium prices that accurately reflect flood risk and influence people to move away from these high-risk areas, should also include channels to provide individuals with the means and resources to move. These could include more access to affordable housing in safe areas that will keep them connected to their current job, or training for jobs so they can continue to fit into the new economy.

Q.2. Avoiding a lapse in the National Flood Insurance Program is an important policy goal, but we must strive for a long-term reauthorization of the program. What are the negative consequences for policyholders associated with short-term reauthorizations?

A.2. Short-term reauthorization may seem like an easy fix to NFIP, but unfortunately, it has caused more harm than good and will cause all positive developments to unravel. Short-term reauthorizations are the antithesis to long-term planning, and as a result, long-term solutions. Exercises that merely kick the can down the road prevent communities from effectively creating and acting on emergency disaster budgets and prevent the program from address-

ing operational shortfalls. This lack of planning pushes the program into a debt cycle that disproportionately falls on the shoulders of taxpayers. As Congress analyzes long-term reauthorization, it must keep sustainability and longevity in mind. Floods are one of the most expensive natural disasters, and while FEMA has taken measures to provide more funding for these communities, Congress must take action to be facilitators, and not inhibitors, of FEMA's advancements.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR SCOTT
FROM STEPHEN ELLIS**

Q.1. This is a deeply important topic to my home State of South Carolina, where I spent over 15 years in the insurance business helping to write flood insurance policies, responding to flood insurance claims, going to homes that had been flooded and watching the families try to piece their lives back together.

One issue that continues to frustrate me is that we have not yet—as a Committee or a country—come up with a way to address repeatedly flooded properties; homes and businesses that time and again see flood waters rise, putting people in harm's way.

Within the NFIP these properties represent about 1 percent of the policies, yet make up approximately 30 percent of the claims.

In the last two Congresses, I have authored a bipartisan proposal, the Repeatedly Flooded Communities Preparation Act, which would offer a community response to lowering flood risk in these problem areas.

This is not a one-size-fits-all approach but a community by community approach. Some communities need voluntary buyouts, others need drainage improvements, while others may simply need to clean out storm drains regularly.

Can you comment on the problem of repeat loss, the community approach to addressing it, and what policymakers can learn from work already being done around the country?

A.1. FEMA has been somewhat proactive in addressing repetitive loss. The agency previously established the Severe Repetitive Loss (SRL) grant program to provide funding for high risk communities to access capital to implement mitigation strategies, as well as other similar programs such as the Post-Disaster Hazard Mitigation Grant Program and the Flood Mitigation Assistance Program. Congress has also been vocal on this issue. The Repeatedly Flooded Communities Preparation Act was the needed legislative pressure to get FEMA and others to continue conversations on how to best turn ideas into action, and how to advance mitigation discussions into tangible solutions with results. The arrival of FEMA's Risk Rating 2.0 will provide a more accurate and granular look at flood risk and enable adjusted pricing as a result. The more accurate pricing mechanism would mean that those living in areas at greater risk of flooding pay more while residents in communities with lower risk would pay less. At the same time, TCS believes the best way to protect homeowners and taxpayers is to reduce risk, which is why we support robust investments in mitigation for communities.

The reality is that taxpayers cannot continue to shoulder the costs of and the NFIP cannot financially support repetitive loss properties. NFIP is the only Federal program that incentivizes people to put themselves in harm's way. Policymakers at all levels of Government must do more to discourage building and rebuilding in flood-prone areas and provide options, including but not limited to voluntary buyouts of property owners.

Further, and as Congress continues to debate infrastructure funding, lawmakers should seriously consider imposing standards to ensure that investments made with Federal funds are able to withstand flooding and other natural disasters in an effort to better protect communities nationwide. TCS has no problem attaching strings to this Federal funding to protect taxpayers. If an individual or community refuses to take the necessary steps to protect the Federal taxpayer's investment, they don't have to take the cash.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR SINEMA
FROM R.J. LEHMANN**

Q.1. Last year, the University of Arizona led and published a study in the *Journal of Environmental Economics and Management* about the National Flood Insurance Program. The study found that Black and Hispanic homeowners are more likely to live in high-risk flood zones and could be disproportionately affected by reforms to the program. What do you make of this study, and how should it inform ongoing efforts to reform and improve NFIP?

A.1. Response not received in time for publication.

Q.2. Avoiding a lapse in the National Flood Insurance Program is an important policy goal, but we must strive for a long-term reauthorization of the program. What are the negative consequences for policyholders associated with short-term reauthorizations?

A.2. Response not received in time for publication.

ADDITIONAL MATERIAL SUPPLIED FOR THE RECORD

STATEMENT SUBMITTED BY RAA

STATEMENT

REINSURANCE ASSOCIATION OF AMERICA**STATEMENT FOR THE RECORD****UNITED STATES SENATE
COMMITTEE ON
BANKING, HOUSING, AND
URBAN AFFAIRS****HEARING ON****"REAUTHORIZATION OF
THE NATIONAL FLOOD INSURANCE PROGRAM,
PART I"****MAY 18, 2021**

The Reinsurance Association of America (RAA) appreciates Chairman Sherrod Brown, Ranking Member Patrick Toomey, and other Committee on Banking, Housing, and Urban Affairs (Committee) members' interest in the U.S. property casualty (re)insurance industry. Thank you for holding today's hearing entitled, "Reauthorization of the National Flood Insurance Program, Part I."

The RAA is the leading trade association of property and casualty reinsurers doing business in the United States. RAA membership is diverse, including reinsurance underwriters and intermediaries licensed in the U.S. and those that conduct business on a cross border basis. The RAA also has life reinsurance affiliates and insurance-linked securities fund managers and market participants that are engaged in the assumption of property/casualty risks. The RAA represents its members before state, federal and international bodies.

The RAA supports a long-term reauthorization of the National Flood Insurance Program (NFIP) and flood insurance reforms. The RAA also supports improving America's housing and community resilience in the face of climate and natural disaster risks, including the risk of flooding. We recommend including, in legislation considered by the Committee, provisions to help improve housing resilience and to prioritize communities that are the most in need and most at risk of natural disaster(s).

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Climate Change and Natural Disaster Risks

The RAA has had a longstanding policy on climate change and is committed to working with policymakers, regulators, and the scientific, academic and business communities to assist in promoting awareness and understanding of the risks associated with climate change. A copy of RAA's policy can be found in Appendix A, which is attached to this statement. It is especially critical that at the federal, state, and local levels, the public sector in partnership with the private sector address significant natural disaster risks well in advance of the next significant flood, earthquake, or other devastating natural disaster event. Addressing these risks urgently is particularly important as the frequency, severity, devastation, and costs of many natural disasters continue to increase due to climate change.

In the financial services sector, property casualty insurers are the most exposed to natural disasters, especially those impacted by climate and weather. Within the insurance sector, reinsurers have the greatest financial stake in appropriate risk assessment. The industry is at great financial risk if it does not understand global and regional climate impacts, variability and developing scientific assessment of a changing climate. Integrating this information into the insurance system is an essential function. Insurance is a critical component for economic and social recovery from the effects of extreme weather and climate driven events. Open market insurance pricing is also a mechanism for conveying the consequences of decisions about where and how we build and where people chose to live. In this regard, it must be proactive and forward looking in a changing climate/weather environment.

Our industry is science based. Blending the actuarial sciences with the natural sciences is critical to providing the public with the financial resources needed to recover from natural catastrophic events. As the scientific community's knowledge of climate change continues to develop, it is important for our communities to incorporate that information into the exposure and risk assessment process and that it be conveyed to stakeholders, policyholders, the public and public officials that can or should address adaptation and mitigation alternatives. Developing an understanding about climate and its impact on various risks – for example, droughts, heat waves, the frequency and intensity of tropical hurricanes, thunderstorms and convective events, rising sea levels and storm surge, more extreme precipitation events and flooding – is critical to our role in translating the interdependencies of weather, climate risk assessment and pricing.

Climate-related and natural disaster risk exposure is broad-ranging. These risks are widespread, geographically diverse, and include a range of natural disaster perils impacting homeowners and renters, property owners, servicers, mortgage investors, taxpayers, and communities. It is important to ensure that these risk exposures are addressed and mitigated. Mitigation includes physical enhancements and insurance to better protect residential properties and other infrastructure against damage caused by natural disasters. For government programs, government-sponsored enterprises, private sector financial institutions, and taxpayers, financial mitigation also is important to protect against any mortgage credit default risk associated with natural disaster risk.

The RAA believes a variety of solutions should be used to improve housing and community resilience to the benefit of all those in the value chain of climate and natural disaster risk exposure. The RAA also believes that it is important to address geographic, natural disaster peril, and socioeconomic diversity. Some traditional solutions, like property insurance protections for homeowners certainly can and should be utilized, but new analytical capabilities that increasingly

and intelligently can help reduce risk and direct resources to achieving that goal also should be pursued.

Investing in Resilience for America's Communities is Critical, Logical, and Smart

In December 2019, the National Institute of Building Sciences issued its “Natural Hazard Mitigation Saves” report, which was funded by the U.S. Department of Housing and Urban Development.¹ The report describes that federal disaster mitigation has saved \$6 for every \$1 invested since 1995 and other mitigation-related activities, such as updating building codes to ensure resilient structures, and investments can save between \$4 and \$11 for every \$1 spent. According to NOAA, “Each state has been affected by at least \$1 billion-dollar disaster since 1980.”² There is demand, but the supply is inadequate.

Reducing the impact of climate and natural disaster risk in the first place, followed by other protections like traditional insurance and risk transfer, particularly to benefit low-income and minority homeowners and renters should be the top public and private-sector priority for climate and natural disaster resilience and risk management. That can be achieved by, first, identifying the communities that are most in need and most at risk of significant natural disasters. And second, it can be achieved by creating statutory and regulatory structures and incentives that direct public and private sector investments in infrastructure resilience.

This Committee and other committees in Congress are considering ideas to direct more public and private sector funds toward infrastructure resilience, which includes housing, in this way. The HUD housing programs, the U.S. Department of the Treasury’s Capital Magnet Fund, and other federal programs should direct funding resources toward achieving housing climate and natural disaster resilience for “extremely low- and very low-income households” that face significant natural disaster risk and particularly that expose taxpayer-backed federal housing programs to climate and natural disaster risks.³ In general, RAA recommends that the Financial Stability Oversight Council and all of its members prioritize climate and natural disaster resilience efforts for federally funded and federally-backed residential properties in these most in need and most at risk areas.

The RAA’s Community Disaster Resilience Proposal

Low-income and minority neighborhoods are disproportionately impacted by natural disasters.⁴ This fact should be a priority consideration for policymakers and the public and private sectors as we work to understand and address the climate and natural disaster-related risks facing communities across America. The RAA has developed an innovative approach to addressing climate and natural disaster resilience, specifically to improve infrastructure resilience in the face of natural disasters and address socio-economic disparities. The RAA urges Congress to include our proposal as part of the infrastructure legislation and other legislation that may be under consideration by this Committee and other committees in Congress.

¹ <https://www.nibs.org/projects/natural-hazard-mitigation-saves-2019-report>

² <https://www.climate.gov/news-features/blogs/beyond-data/2010-2019-landmark-decade-us-billion-dollar-weather-and-climate>

³ <https://www.hudexchange.info/programs/hdf/>; <https://www.cdfifund.gov/programs-training/programs/cmf>

⁴ <https://www.americanprogress.org/wp-content/uploads/2013/08/LowIncomeResilience-2.pdf>

The RAA developed an analytical tool and legislative proposal that aligns with the President's plan and congressional interests to rebuild America's infrastructure, enable green initiatives and smart building to address the impact of climate change, create needed jobs and fuel the economic recovery, support historically underserved communities where the need is often greatest, and provide sources of much-needed resilience project funding to states and localities. The RAA's data analytics tool utilizes publicly available data to very clearly, by county, congressional district, and census tract in each state, understand where natural perils, older housing stock, and disadvantaged populations converge.

We urge policymakers to use this information, particularly the Federal Emergency Management Agency (FEMA's) National Risk Index (NRI) supplemented with data from the U.S. Census Bureau's American Community Survey (ACS), to understand the U.S. landscape and pinpoint and prioritize communities that are most in need and most at risk of significant natural disasters, diversified by state, geography, and natural disaster peril.⁵

Appendix B of this statement includes examples from RAA's tool, visualizing how FEMA's NRI and data from the Census Bureau's ACS can be used to understand vulnerability and risk for the State of Ohio, represented by Chairman Brown, and the State of Pennsylvania, represented by Ranking Member Toomey.

In addition, the RAA's proposal was favorably mentioned during a March 18, 2021, House Transportation and Infrastructure Subcommittee on Economic Development, Public Buildings, and Emergency Management hearing on "Building Smarter: The Benefits of Investing in Resilience and Mitigation."⁶ Two witnesses, separately representing the Insurance Institute for Business and Home Safety and The Pew Charitable Trusts, expressed support for RAA's proposal as part of their testimony. The proposal also was discussed during the question-and-answer period of the hearing.

In general, the RAA's proposal would create a federal structure that directs public and private-sector funding for resilience projects to communities most in need and most at risk from significant natural disaster(s). More specifically, it would:

- 1) Address the impact of climate change through data-driven analysis;
- 2) Establish community disaster resilience zones, or CDRZ, for communities most in need and most at risk of significant natural disaster(s); and
- 3) Direct and incentivize public and private-sector investment in the CDRZ to improve infrastructure resilience.

⁵ <https://hazards.geoplatform.gov/portal/apps/MapSeries/index.html?appid=ddf915a24fb24dc8863eed96bc3345f8>;
<https://www.census.gov/programs-surveys/acs>

⁶ <https://transportation.house.gov/committee-activity/hearings/building-smarter-the-benefits-of-investing-in-resilience-and-mitigation>

RAA's legislative proposal has a few core components to help achieve these objectives:

The first generally would codify, enhance, and utilize the FEMA's NRI data to find the intersection of risk, vulnerability, and low community resilience scores, as the basis to identify and establish the CDRZ that reflect diversity among the states by geography and type of peril, such as fire storm/wildfire, tornado, hurricane, flooding, ice storms, earthquake, wind, hail, and drought.

The second would, within CDRZ, coalesce a variety of funding mechanisms, providing a menu of financing enhancements and tax incentives that can focus federal, state, local, charitable, and private-sector investment in resilience projects. For example, to help fund resilience projects in CDRZ the proposal would establish:

- CDRZ taxable direct pay bonds, like Recovery Zone Economic Development Bonds, which were one of three types of Build America Bonds that Congress created in 2009 as part of financial crisis economic recovery legislation;
- CDRZ tax-exempt facility private activity bonds subject to a separate volume cap, like Recovery Zone Facility Bonds (also in the 2009 recovery legislation), and provide for life and property/casualty insurers' exclusion from proration for investments in these CDRZ bonds;
- Federal tax credits for community-level projects in CDRZ that are tradeable, transferrable, and do not expire, and allow proceeds from the sale of certified tax credits to be used to, for example, meet matching requirements for federally funded resilience projects;
- Federal transferrable tax credits for individuals for resilience improvements to housing in CDRZ; and
- Federal tax credits for charitable contributions for projects in CDRZ.

The third would prioritize, set aside, and unlock federal program funding to invest in resilience projects in CDRZ. This could include waiving, reducing, or allowing other forms of financing, such as the proceeds from the sale of tax credits mentioned above and in-kind and charitable donations, to qualify for matching funds for resilience projects in CDRZ. Allowing a variety of resources to contribute to and invest in resilience projects in CDRZ, as they relate to federal program matching fund requirements, could significantly unlock resources for CDRZ resilience projects. For example, with more flexibility to meet matching fund requirements, CDRZ resilience projects could more likely benefit from the Federal Emergency Management Agency (FEMA) Building Resilience Infrastructure and Communities Program (BRIC) program funding and funding from other programs that fall under the jurisdiction of this Committee.

Housing is Infrastructure

Given that the majority of federal housing programs fall under the jurisdiction of this Committee, it has an important leadership role to play in prioritizing and directing federal program funding toward housing resilience. Housing, especially affordable housing, that can withstand the most significant disaster(s) that communities across the country face is an investment in critical infrastructure. To that end, the RAA supports language that House Financial Services Committee Chairwoman Maxine Waters included in her “Housing is Infrastructure Act of 2021” discussion draft legislation that was noticed by the House Financial Services Committee for its April 14, 2021, legislative hearing that:⁷

- Included and coupled set aside funding for climate and natural disaster resilience with set aside funding for water and energy efficiency for each of eleven federally funded housing programs;
- Increased the set aside funding for climate and natural disaster resilience and water and energy efficiency for each of eleven federally funded housing programs from 10 to 15 percent, amounting to almost \$17 Billion of \$113 Billion in federal funding set aside for these purposes;
- As part of an additional \$70 Billion in funding for public housing, prioritized applications that include climate and natural disaster resilience and water and energy efficiency plans; and
- Set aside federal grant funds for housing in areas of persistent poverty.

The RAA would like to continue to work with Chairwoman Waters, Chairman Brown, Ranking Member Toomey, and members of both committees on the legislation and other legislation the committees may consider so that it most impactfully can help communities that are most in need and most at risk of natural disaster(s) to become more resilient.

The Protection Gap, Insurance, and the NFIP

Natural Disaster Insurance Protection Gap

Homeowners and renters, property owners, mortgage investors, taxpayers, and communities face risks due to climate change, natural disaster risks, and the lack of insurance coverage or underinsurance of such coverage. There is a serious and significant natural disaster insurance protection gap in the United States. The U.S. Department of the Treasury’s Federal Insurance Office’s Federal Advisory Committee on Insurance (FACI) has a subcommittee that is dedicated to addressing it. Several RAA members serve on both the FACI and the “Subcommittee on Addressing the Protection Gap through Public-Private Partnerships and Other Mechanisms.” During FACI’s December 2019 meeting, the Subcommittee cited statistics to provide examples of the insurance protection gap in the U.S. and issued recommendations that FHFA should consider.⁸

⁷ <https://financialservices.house.gov/calendar/eventsingle.aspx?EventID=407532>

⁸ https://home.treasury.gov/system/files/311/December2019FACI_ProtectionGapPresentation.pdf;

https://home.treasury.gov/system/files/311/December2019FACI_ProtectionGapProposedRecs.pdf

The National Association of Insurance Commissioners (NAIC) has published alarming statistics about the disaster insurance protection gap. For example, one NAIC statistic cited in the Subcommittee's presentation is that "Only 1% of properties outside of flood zones have flood insurance, yet half of U.S. floods occur in these areas." Various studies and reports, including a 2018 report by AIR Worldwide, have warned that the next big earthquake to impact California, likely by 2044, could result in \$170 billion in total damage and almost half would be residential-related loss, \$37 billion of which would be uninsured.⁹ Given the likelihood of future, significant, and costly natural disasters throughout the U.S. and uninsured residential costs, it is important to have a coordinated effort and to close the insurance protection gap.

Congress, FEMA, the Treasury, the NAIC, other relevant federal agencies, state and local officials, and the private sector, including reinsurers, should determine a comprehensive strategy to identify and address the natural disaster insurance protection gap in the U.S. and the risks it poses to homeowners and renters, property owners, individuals, businesses, and federal programs and taxpayers – particularly as it relates to frequent and potentially severe perils, such as floods and earthquakes. It also is important to close the insurance protection gap, and Congress and federal regulators should help initiate efforts to close the insurance protection gap via traditional insurance and risk transfer. Congress and federal regulators can further facilitate a private market for flood insurance, potentially providing consumers with more flood insurance options. One way to achieve this is for the Federal Housing Finance Agency (FHFA) and HUD, for the Federal Housing Administration, to align their regulations and/or guidance for private flood insurance with those issued in 2019 by federal lending regulators.¹⁰ (In 2020, HUD issued a proposed regulation to align its regulations and guidance with that of the 2019 federal lending regulators¹¹).

Primary Insurance

Traditional insurance solutions – such as primary property insurance protection, including earthquake, wind, fire, and flood insurance – are critical for people, property, jobs, businesses, and communities to be resilient in the aftermath of natural disasters. That is especially true since federal disaster assistance is provided only when there is a federally declared disaster and typically results in a fraction of what insurance assistance can provide. For example, according to FEMA, in 2019, the average, annual flood insurance premium was \$700 (about \$58 per month) and the average claim payout was \$53,000.¹² Meanwhile, in 2019, federal disaster assistance was capped at \$34,900 with an average annual payment of \$6,246.¹³ Ensuring that the protection gap is bridged, and property insurance adequately covers the climate and natural disaster risk(s) involved are of utmost importance. Risk transfer products that protect each stakeholder from climate and natural disaster risks can play an important role.

⁹ <https://www.air-worldwide.com/Publications/Infographics/Who-Will-Pay-for-the-Next-Great-California-Earthquake/>

¹⁰ <https://www.fdic.gov/news/financial-institution-letters/2019/fil19008.html>

¹¹ <https://www.federalregister.gov/documents/2020/11/23/2020-25105/acceptance-of-private-flood-insurance-for-fha-insured-mortgages>; https://www.hud.gov/press/press_releases_media_advisories/HUD_No_20_191

¹² <https://www.fema.gov/data-visualization/historical-flood-risk-and-costs>

¹³ <https://www.federalregister.gov/documents/2018/10/22/2018-22884/notice-of-maximum-amount-of-assistance-under-the-individuals-and-households-program>; FEMA communication with RAA, 4/16/2021

Parametric Insurance

To supplement traditional insurance solutions – including to provide coverage for evacuation and to infuse liquidity quickly into a community to cover immediate post-disaster expenses – parametric insurance addresses the protection gap and enhances community resilience. Parametric solutions have been developed for earthquake, wind, fire, and flood risks. This coverage can be tailored to meet the needs of individuals, public entities, and lenders.

Risk Transfer

Risk transfer, including reinsurance, is a successful solution used by both the public and private sector including (re)insurers, financial institutions, federal and state programs, and government-sponsored enterprises, Fannie Mae and Freddie Mac. One notable example of a federal program's use of risk transfer is FEMA's Reinsurance Program. In the program's first year (2017), FEMA collected \$1.042 billion to help pay the cost of NFIP losses and claims resulting from Hurricane Harvey. The coverage cost \$150 million, and the program successfully renewed the subsequent year. This example is a true testament of successful private public partnerships. (Please see below for more detailed comments on the NFIP). The reinsurance industry also successfully has partnered with the California Earthquake Authority (CEA) on reinsurance protection for its earthquake risks as well as the recently created California Wildfire Fund, which also is administered by the CEA. Similarly, risk transfer has been an important part of the Florida Citizens Property Insurance Corporation and the Florida Hurricane Catastrophe Fund (FHCF) for many years.

National Flood Insurance Program

The RAA greatly appreciates Chairman Brown, Ranking Member Toomey, and Committee members for starting a formal conversation today on reauthorization of the NFIP and urges the Committee to reauthorize NFIP and to enact flood insurance and mitigation-related reforms. The RAA supports a long-term reauthorization of the NFIP and reforms that:

- Continue to strengthen NFIP's financial framework and resiliency so that it can pay claims, particularly after catastrophic events;
- Remove impediments to consumer choice and confirm consumer protections; and
- Modernize the statute to give FEMA additional tools to encourage additional private market participation, including capital, in NFIP to benefit consumers and taxpayers.

From a reinsurance perspective, this statement highlights our top priorities for flood insurance reform. As a member, RAA also supports the SmarterSafer and BuildStrong coalitions' reform proposals, and RAA supports legislation to create a state flood mitigation revolving fund program (for additional information, please see Appendix C of this statement).

- I. **Support NFIP Reinsurance Program.** The RAA supports FEMA's NFIP Reinsurance Program and would request that it be preserved in NFIP reauthorization and reform

legislation.¹⁴ The RAA has long advocated for the NFIP to utilize the private market to help manage the financial burden of the NFIP's catastrophic flood risk by providing financial backing for the government's flood risk, protecting taxpayers, and helping the program to be more resilient and pay claims. In 2021, for the fifth consecutive year, FEMA has successfully administered its NFIP Reinsurance Program that transfers risk from the NFIP to the capital markets, specifically through reinsurance placements and a catastrophe bond issuance. As this statement previously mentioned, the benefits of FEMA's risk transfer program were made clear in the program's first year (2017), when FEMA collected \$1.042 billion to help pay the cost of NFIP losses and claims resulting from Hurricane Harvey. The coverage cost \$150 million, and the program successfully renewed the subsequent year. The amount FEMA collected helped pay NFIP policyholder claims, improved NFIP's financial viability, and protected taxpayers.

- II. Confirm Consumer Protections.** The RAA supports legislation from the 116th Congress (H.R. 1666) introduced by Representatives Kathy Castor (D-FL) and Blaine Luetkemeyer (R-MO) to amend the National Flood Insurance Act of 1968 (NFIA) to "consider any period during which a property was continuously covered by private flood insurance to be a period of continuous coverage, including for the purposes of NFIP subsidies."¹⁵ In the previous two congresses, similar legislation had broad bipartisan support. In 2016, by a vote of 419-0, the House passed a similar provision as part of H.R. 2901 and, in 2017, by a vote of 58-0, the House Financial Services Committee passed a similar provision as part of H.R. 1422.

Flood insurance uncertainty for consumers, as it relates to continuous coverage and potential rate increases by the NFIP, are an impediment to consumers buying private flood insurance and limit consumers' choices. Insurance agents and brokers have stated that "...the risk of a substantial NFIP rate increase should the consumer later wish to return to the NFIP often makes insurance agents and brokers hesitant to recommend private flood insurance policies."¹⁶ It is important that Congress and FEMA provide consumers with clarity about continuous coverage compliance so that current and future NFIP policyholders are confident that they have complied with the law's continuous coverage requirements by having an NFIP or private flood insurance policy. For example, if a consumer leaves the NFIP to secure a private flood policy with better coverage and a better price and later re-assumes an NFIP policy, so long as the consumer had continuous coverage, that NFIP policy should be at the same rate and terms as if the consumer had continuously maintained an NFIP policy.

- III. Modernize 1968 NFIA Part A Authority.** When enacted in 1968, over 50 years ago, the NFIA incorporated two approaches to providing consumers with flood insurance, Part A and Part B. As the private flood insurance market continues to develop with reforms Congress has made to Part B, particularly those enacted in 2012 and 2014, Congress also should modernize Part A of the NFIA and clarify that FEMA can use its authorities simultaneously with the Part B program. Re-purposing and modernizing the statutory

¹⁴ <https://www.fema.gov/flood-insurance/work-with-nfip/reinsurance>

¹⁵ <https://www.congress.gov/bills/115th-congress/house-bill/1422?q=%7B%22search%22%3A%5B%22H.R.+1422%22%5D%7D&s=1.&r=3>

¹⁶ <https://financialservices.house.gov/uploadedfiles/hhrg-116-ba00-wstate-heidricke-20190313.pdf>

language in Part A would give FEMA additional tools to partner with private insurers, facilitate the participation of private insurers in NFIP on a risk-sharing basis, further improve NFIP's viability, increase the NFIP's resources to pay claims, and increase flood insurance opportunities for consumers. Part A reforms also can lead to a stronger public-private partnership, give private insurers experience in underwriting flood risk, and help close the flood insurance coverage gap.

The Part A statutory language currently authorizes the FEMA Administrator (Administrator) to facilitate and assist the creation of a pool of insurers on a risk sharing basis with the Federal government to provide flood insurance through their network of agents and policyholder relationships. Under the statute, the Administrator defines the qualifications of insurers for the pool and risk capital to be provided. The Administrator is authorized to enter into a contractual relationship with the pool defining the insured risk to be retained and the government's risk through its reinsurance of the pool. Pursuant to the statute, the financial arrangement recognizes that the NFIP provides some subsidies to certain policyholders.

The current NFIP program, which is authorized under NFIA Part B, provides that the Federal government through the NFIP would fully bear the insured risk and that insurers could be retained as fiscal agents of the NFIP with no risk bearing role. (The recent exception to that is NFIP's Reinsurance Program referenced above.)

The RAA specifically recommends that NFIP reform and reauthorization legislation include the amendment offered to the "National Flood Insurance Program Reauthorization Act of 2019" and withdrawn by Representative Blaine Luetkemeyer (R-MO) during the House Financial Services Committee's June 11-12, 2019, mark up.¹⁷ The amendment language would: (1) Require FEMA to solicit ideas for risk-sharing demonstration programs; (2) Provide FEMA with authority, but not require it, to conduct risk-sharing demonstration programs; and (3) Make technical amendments to the National Flood Insurance Act of 1968 Part A authority, which FEMA can use for risk-sharing demonstration programs.

The above-mentioned reforms can further facilitate the development of a private flood insurance market and improve the viability of NFIP. The reinsurance market is interested and has the capacity to underwrite flood insurance risk, including extreme flood risk, in both the public NFIP program, private market, and any future public-private flood insurance partnerships. Actions taken in recent years by some states, such as Florida, have demonstrated the interest and benefits of private insurers assuming a broad cross-section of risk, and the same would result from the above flood insurance reforms. Reinsurers stand ready to partner with both the private- and public-sectors as the flood market transitions.

¹⁷ <https://financialservices.house.gov/calendar/eventsingle.aspx?EventID=407747>;
<https://financialservices.house.gov/calendar/eventsingle.aspx?EventID=403829>

Conclusion

The RAA looks forward to continuing to work with Chairman Brown, Ranking Member Toomey, and other members of the Committee on legislation to improve America's housing and community resilience in the face of climate and natural disaster risks, to prioritize communities that are the most in need and most at risk of natural disaster(s), to close the insurance protection gap, and enact a long-term reauthorization of the NFIP and flood insurance reforms that facilitate the development of a private flood insurance market. Thank you for your consideration of our recommendations.

APPENDIX A



RAA CLIMATE CHANGE POLICY

The world's climate is changing. An increase in the severity and frequency of extreme weather is impacting daily life for the global community. Mounting evidence from the scientific community makes it increasingly clear that climate change is having a significant effect on the world's social and economic risks and that it will continue to do so. The scientific evidence also strongly indicates that human behavior is having an impact on the climate, primarily through carbon emissions.

With a fundamental role in assisting individuals and businesses manage risk, it is prudent for the insurance industry to acknowledge the changing climate as well as the risks it poses to all areas of its business. Furthermore, policymaking and corporate strategies must also reflect measures for the mitigation of, and adaption to, climate change.

The RAA is committed to working with policymakers, regulators, and the scientific, academic and business communities to assist in promoting awareness and understanding of the risks associated with climate change.

Specifically, the RAA will take the following actions:

- In the scientific arena, promote research on climate change, including improvements in the capability to assess climate change and extreme weather events. We acknowledge the importance of enhanced national and regional forecasting. Additionally, recognizing our primary reliance on the scientific community for fundamental insights about climate change, the RAA and individual member companies will provide to the public, insurers and to policymakers our understanding of the likely impact of climate change, particularly the impact of extreme weather events on insurers and policyholders.
- Support climate change awareness for insurers and policyholders. Additionally, the RAA will work with regulators and industry to develop appropriate risk disclosure responsibilities of insurers.
- Support the efforts of RAA members and other private market participants to develop and offer financial products and services using risk-based pricing to assist in managing the financial risk associated with climate change and catastrophic risk. The RAA acknowledges the need to improve the evaluation of future risks associated with climate change as a part of the reinsurance risk assessment and capital management processes.
- At the state and national levels, the RAA will work with policymakers to support legislation to mitigate greenhouse gases and take steps to adapt to climate change through improved preventive measures and public initiatives to address the reduction of risks associated with climate change. These measures include natural hazard mitigation

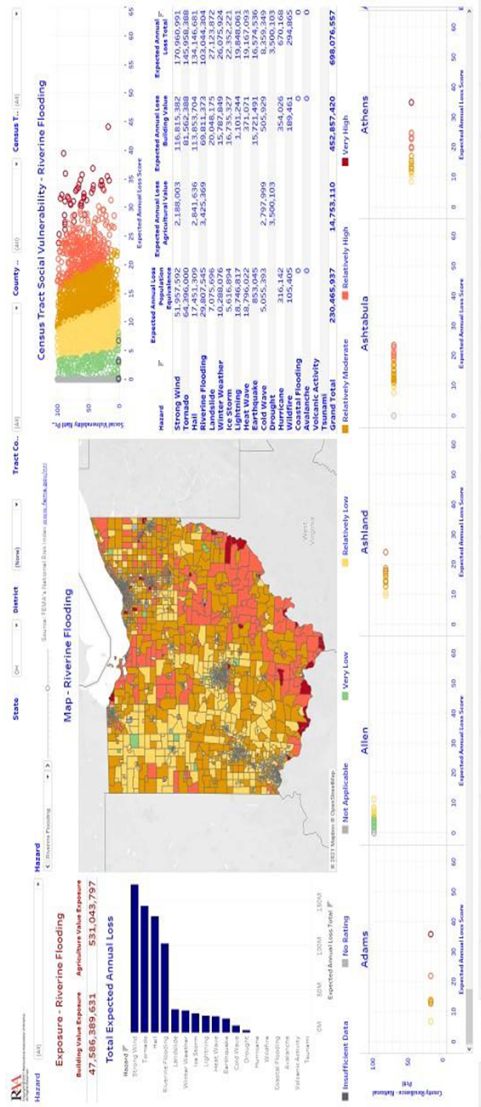
Adopted February 2008

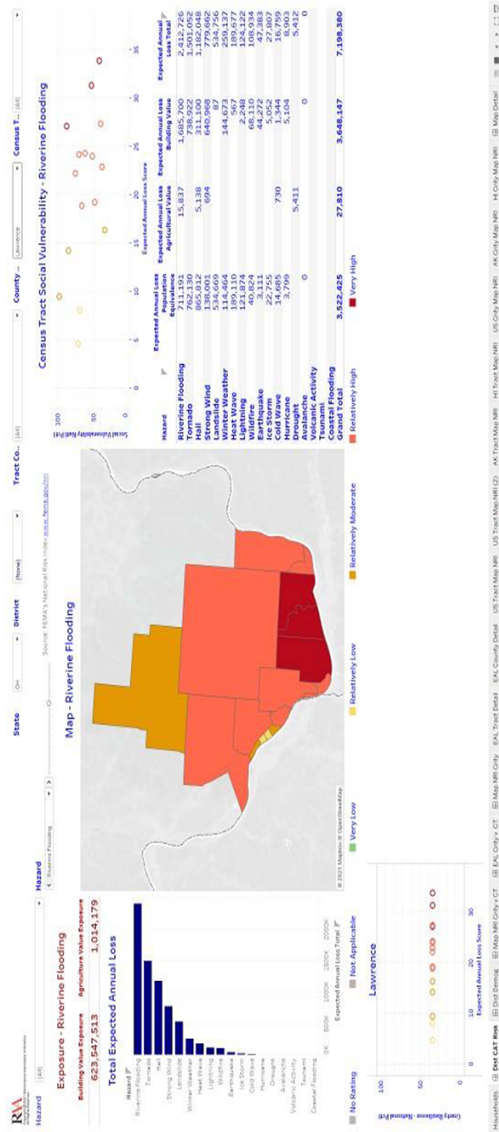
through better land use planning, improved building codes, the use of structurally sound, environmentally friendly building materials, alternative energy sources and other appropriate means.

The RAA will also encourage each of its members to assess the impact of their business operations to analyze their contribution to climate change and to evaluate emissions reductions measures and improve their use of every efficient technologies.

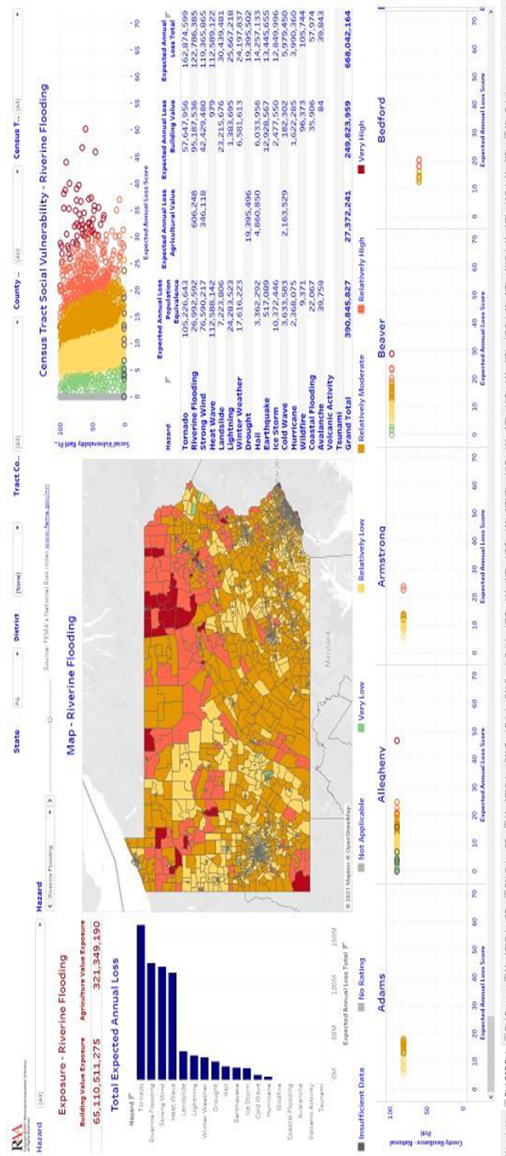
Adopted February 2008

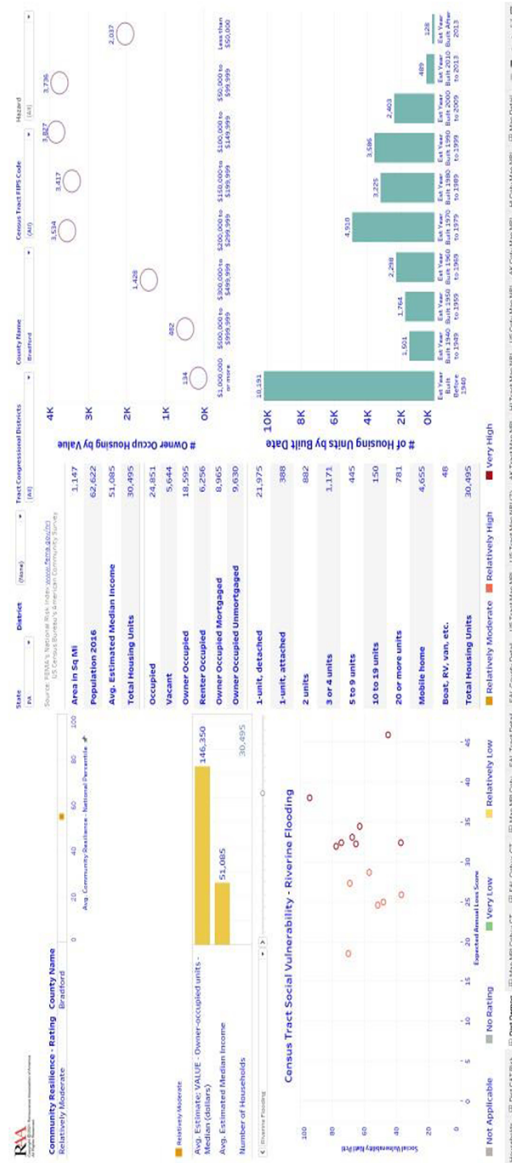
APPENDIX B











APPENDIX C

NATIONAL SUPPORT FOR THE STATE FLOOD MITIGATION REVOLVING FUND:

American Planning Association	Natural Resources Defense Council
American Rivers	Property Casualty Insurance Association of America
American Society of Civil Engineers	Reinsurance Association of America
Association of State Floodplain Managers	Smart Home America
Consumer Mortgage Coalition	St. Bernard Project
Ecological Restoration Business Association	The Nature Conservancy
Enterprise Community Partners	The Pew Charitable Trusts
Insurance Institute for Business & Home Safety	Union of Concerned Scientists
National Institute of Building Sciences	U.S. Resiliency Council
Natural Hazard Mitigation Association	

THE PROBLEM

Flooding is the costliest and most common natural disaster in the U.S., claiming lives, damaging households and businesses, and straining government agencies that provide flood response and relief. Since 2000, flood-related disasters have cost over \$750 billion. The federal government and states need to pursue more investment before disasters strike to help protect our communities and lower the cost burden on American taxpayers in future floods.

THE VALUE OF FLOOD MITIGATION

According to a 2018 report by the National Institute of Building Sciences, for every dollar spent on hazard mitigation, the nation saves \$6. In the case of riverine flood, projects involving acquisition or demolition of flood-prone buildings save \$7 for every dollar invested. The benefits come largely from avoided property damage, casualties associated with storms, and savings when businesses and communities quickly return to normal following a flood event.

Despite these findings, the federal approach to flood disasters continues to focus on response and recovery while underinvesting in preparation. In too many instances, infrastructure or homes are rebuilt as they were, only to flood again. Investments in pre-disaster mitigation have historically failed to meet demand, perpetuating this cycle of loss and repair. Although the federal government spent \$277.6 billion from 2005 to 2014 on overall disaster assistance, the Federal Emergency Management Agency (FEMA) has spent just \$600 million on its Pre-Disaster Mitigation grant program over the same time period.

NEEDED: A NEW FEDERAL-STATE PARTNERSHIP

The federal government can break the cycle of paying to repeatedly rebuild by increasing investments *before* disasters strike. FEMA and other federal agencies, however, cannot solve this problem alone. Localities and states are key decision-makers for policies that affect flood risk, with clear authorities to guide new development away from hazardous areas and enforce building standards that will protect lives and property.

A cost-sharing partnership, capitalized, in part, with federal monies administered by states, and tailored to unique local needs, could provide a long-term, self-sustaining source of financing for a wide range of projects. Since its inception in 1987, for example, the Clean Water State Revolving Fund has leveraged \$41 billion in federal investments and 7.6 billion in corresponding state contributions for \$118 billion in high priority water quality projects. The revolving loan fund model, also used successfully for drinking water treatment facilities, energy efficiency projects, and economic development, could address the nation's flood preparation needs as well.

THE SOLUTION

Legislation introduced in Congress for a State Flood Mitigation Revolving Fund program ([S. 1507](#)) would create a new partnership with states to provide low-interest loans for projects that save lives and dollars.

With federal backing and local engagement, this legislation would allow each state to select and implement the types of mitigation projects best suited to the unique flood hazards it faces. Projects supported by the individual state revolving funds could include elevations and flood proofing of public buildings, businesses, and residences; improvements to stormwater management; assistance to local residents who wish to move out of harm's way; or converting frequently flooded areas into open space amenities.

With billions of dollars and countless lives at risk, and following yet another year of record-breaking storms and floods, now is the time for Congress to act.

MORE SUPPORT FOR THE STATE FLOOD MITIGATION REVOLVING FUND:

CA

American Planning Association – California Chapter
American Planning Association – San Diego Chapter
California Coastkeepers Alliance
California Nevada Cement Association
Friends of the LA River
Greater Irvine Chamber of Commerce
Huntington Beach Chamber of Commerce
Klamath Riverkeeper
Los Angeles Area Chamber of Commerce
Los Angeles Waterkeeper
North Orange County Chamber of Commerce
Orange County Business Council
San Francisco Chamber of Commerce
Sequoia Riverlands Trust

GA

Altamaha Riverkeeper
American Planning Association – Georgia Chapter
Center for a Sustainable Coast
Coosa River Basin Initiative
St. Marys Riverkeeper
Georgia Association of Floodplain Management

IA

Food Bank of Iowa
Iowa State Association of Counties
Iowa Floodplain and Stormwater Management Association

ID

American Planning Association – Idaho Chapter
Association of Idaho Cities

IL

Association of Illinois Soil and Water Conservation
Districts

MN

Minnesota Coalition for the Homeless

MO

Great Rivers Habitat Alliance
Great Rivers Greenway

NC

North Carolina Conservation Network
North Carolina Association of Floodplain Managers
North Carolina Housing Coalition

NY

Orleans County Chamber of Commerce
Regional Plan Association

PA

10,000 Friends of Pennsylvania
Pennsylvania Association of State Floodplain
Managers

SC

Coastal Conservation League
Municipal Association of South Carolina
South Carolina Insurance Association
The Nature Conservancy of South Carolina

TN

Greater Nashville Regional Council
Nashville Civic Design Center
Tennessee Renewable Energy and Economic
Development Council
Tennessee Small Business Alliance
The Housing Fund
Vanderbilt Engineering Center for Transportation and
Operational Resiliency
Walk Bike Nashville

TX

Bay Area Houston Economic Partnership
Concerned Citizens of Texas
Cypress Creek Flood Prevention
Resource Environmental Solutions, LLC
Houston Northwest Chamber of Commerce
Lake Travis Fire Rescue
Resource Environmental Solutions, LLC
West Isle Property Owners Association
West Houston Association

WI

The Association of Wisconsin Regional Planning
Commissions
League of Wisconsin Municipalities
The Wisconsin Land and Water Conservation
Association
Wisconsin EMS Association
American Planning Association – Wisconsin Chapter

REAUTHORIZATION OF THE NATIONAL FLOOD INSURANCE PROGRAM—PART II

THURSDAY, JUNE 17, 2021

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Committee met at 10 a.m., in room 538, Dirksen Senate Office Building, Hon. Sherrod Brown, Chairman of the Committee, presiding.

OPENING STATEMENT OF CHAIRMAN SHERROD BROWN

Chairman BROWN. The Senate Banking, Housing, and Urban Affairs Committee will come to order. Today, as Ranking Member Toomey and I were talking, is our first hearing in person in months and months, and over a year. Welcome back to Room 538. It is exciting to see you here, Senators, staff people, and people at FEMA. Thank you for joining us.

Now that we are in person, Members who are present before the gavel will be called on in order of seniority. Those after the gavel will be added to the queue in the order that you arrived.

Today's hearing is the second in our effort to enact a long-term reauthorization of the National Flood Insurance Program this Congress. In May, we heard from a panel of experts who emphasized we needed to do more to improve flood mapping and mitigation in the face of climate change. Flooding is the most common and most costly natural disaster facing families, businesses, and communities across the country. We hear from constituents how it takes families' homes and memories, it wrecks their finances, it shuts small businesses, it destroys communities' infrastructure.

Disasters often fall hardest on low-income and families of color in communities that have fewer resources to prepare for and respond to them. No matter where you live, everyone in our country pays for the financial fallout from floods, as we spend tax dollars to help families and communities recover.

As the climate continues to change, we can only expect flooding to get worse and become even more common. Spring snow melts, increasingly powerful storms, sunny-day flooding in coastal communities, extreme rainfall could overwhelm our Nation's infrastructure and the land's capacity to absorb water.

Reversing the trajectory of climate change is going to be a long-term effort. While we work on that, we need to help our families and communities become more resilient to the flooding we face now and in the coming decades, and, of course, whenever possible, we need to prevent that flooding altogether.

NFIP is critical to that effort. The program provides \$1.3 trillion in coverage to more than 5 million homes and businesses, and some 22,000 communities. It is not just an insurance program. NFIP's job is not just to help communities after floods but to prevent and minimize the damage in the first place. Through NFIP reauthorization, we have an opportunity to improve NFIP to make our families, businesses, and communities safer and more resilient, and to meet the challenges posed by a changing climate.

Today our witness, Mr. David Maurstad, the Deputy Associate Administrator of FEMA, will provide the agency's perspective on what this Committee should consider as we work on that effort. I am interested in the Administration's recommendation for ways we can strengthen NFIP so that it can provide reliable access to insurance for property owners and renters so that it can address affordability concerns and that it can ensure that more people are aware of flood risk and insured against losses, and so it can help the Nation predict and reduce our overall level of flood risk through investments and improvements in mapping, floodplain management, and mitigation.

And last, I look forward to discussing NFIP's Risk Rating 2.0 effort, which would change rate-setting in NFIP. We want to hear more about how FEMA communicates with stakeholders about these changes, better understand how these rates will affect low- and moderate-income communities, many of whom lack the resources to renovate or move out of harm's way.

I look forward to continuing this work with Members of the Committee to strengthen NFIP and take a comprehensive approach to mitigating flood risk through a long-term reauthorization bill.

Ranking Member Toomey.

OPENING STATEMENT OF SENATOR PATRICK J. TOOMEY

Senator TOOMEY. Thank you, Mr. Chairman, and thank you, Administrator Maurstad for joining us today for our second NFIP reauthorization hearing. As I mentioned at our last hearing, finding a consensus on reauthorization will be challenging, and time is tight, but it is important that we try to do this. I am ready to work, and I hope we can reach an agreement on the long-term reauthorization that improves the program.

But first let me take a moment to remind everyone of the scope of the NFIP's challenges. In the last 16 years, the NFIP has had to borrow nearly \$40 billion to pay claims. In other words, the NFIP has lost an average of about \$2.25 billion per year over the last 16 years, and these are multiple different events, not just a single event. These losses are particularly shocking in the context of the NFIP's annual premiums collected, which is \$4.6 billion.

So clearly the NFIP systematically underprices flood insurance, and frustratingly, it is the policies of Congress that are the root cause of this, not FEMA.

During our last hearing I discussed several of my priorities in reauthorization, and first I would say is let's do no harm. Right now, under existing law, NFIP is moving toward an actuarially sound premium program. We should not interrupt that progress. Second, we should encourage more private capital in the form of private policies and private reinsurance. Third, to the extent that subsidies

persist, they really should be better targeted. And fourth, I think we should improve communication with homeowners and home buyers so that they understand fully the flood risk of properties that they own or are contemplating buying.

Let me elaborate a little bit. First, on do no harm. As our understanding of flood risks change, we need to allow NFIP to keep up with those changes. For instance, I have long heard complaints about mapping, and I agree we need better flood maps, and I support taking steps to improve maps. But in some ways, better mapping is really a means to an end. It is not an end unto itself. Mapping, in fact, is the easy part, in a way. The hard part is using those improved maps to better plan development, mitigate risk, and price flood insurance premiums appropriately.

Fortunately, FEMA is moving in the right direction with its development of Risk Rating 2.0. FEMA has worked for years to build a better risk rating model, and it incorporates far more granular data in setting premiums, including geography and flooding frequency and flood types, you know, river versus ocean, and building characteristics. And when Risk Rating 2.0 is implemented, we will not only have a more fair NFIP, but also a more fiscally sound NFIP. So reauthorization really should not interrupt the implementation of Risk Rating 2.0.

Of course, that implementation will be a challenge. After all, NFIP has been using more or less the same old system for the last half century. Administrator Maurstad, I urge you, encourage you to continue to work hand in glove with the Write-Your-Own insurers who sell and service NFIP policies. I certainly hope that there will not be a turbulent rollout, because that could be used by some as an opportunity to kill some really important reforms and improvements in the program.

And while successful implementation of Risk Rating 2.0 will make NFIP a better program, it will not be a perfect program, and that is one of the reasons why I think we should continue to facilitate expansion of the private flood insurance market. My home State of Pennsylvania has been a leader on this front. As of January of this year, there were nearly 13,000 private flood insurance policies in Pennsylvania. That is almost 20 percent of all Pennsylvania flood insurance policies.

And private uptake should come as no surprise. NFIP data on Risk Rating 2.0 implementation reveals that millions of American policyholders are currently overpaying for flood insurance. Over 200,000 NFIP policyholders are overpaying by at least \$100 a month. That is \$1,200 per year. And besides competing on price, private flood may bring better products, maybe all-peril coverage, which would mean no more debate about whether a claim results from water or wind damage.

And further, private flood insurance brings more capacity to the market. That means more uptake, by more homeowners, which I think is a good thing. It also means more resources to process claims after a major flooding event like Superstorm Sandy, an event that, as my colleagues know all too well, overwhelmed FEMA.

Finally, I just want to briefly touch on subsidies within NFIP. As a general principle, I do not think we should be encouraging people

to live in flood-prone areas by providing flood insurance subsidies, but I acknowledge that over the past 50 years, NFIP has acclimated homeowners to a world in which these subsidies do exist. And so it would be unfair to suddenly and completely remove them, but in the interest of fairness and program solvency, I think these property-based subsidies should be phased out over time.

Today, properties with subsidized NFIP premiums are overwhelmingly located in our wealthiest communities, and subsidized NFIP premiums are rare in lower-income communities. How does that make sense? I am open to finding ways to help current, low-income owners afford flood insurance, but such help should not interrupt a long-term trend toward true, risk-based NFIP premiums.

In conclusion, Mr. Chairman, I think the current system of NFIP is not working properly, it is problematic for taxpayers who have to bail it out, year in and year out, it is bad for homeowners and future homeowners from whom NFIP obscures the true nature of the flood risk. I recognize we cannot fix it all overnight, but I think the 2.0 reforms are a step in the right direction, and we can use reauthorization as an opportunity to move further in a better direction. Thank you.

Chairman BROWN. Thank you, Senator Toomey. I will introduce today's witness. David Maurstad serves as Deputy Associate Administrator for Federal Insurance and Mitigation at FEMA. He was appointed to the position in 2018, after serving as Assistant Administrator since 2016. In this role, he serves as the senior executive of the NFIP. He is a former mayor, and he saw the Blue River flood, I think regularly or at least often, and he is a former lieutenant Governor of Nebraska also, and brings a wealth of private sector expertise to his job also.

Mr. Maurstad, you are recognized for 5 minutes, or whatever you need. Thank you.

STATEMENT OF DAVID I. MAURSTAD, DEPUTY ASSOCIATE ADMINISTRATOR, FEDERAL INSURANCE AND MITIGATION ADMINISTRATION, FEDERAL EMERGENCY MANAGEMENT AGENCY

Mr. MAURSTAD. Thank you. Good morning, Chairman Brown, Ranking Member Toomey, and Members of the Committee. My name is David Maurstad and I am the Deputy Associate Administrator for Insurance and Mitigation, responsible for directing Federal Emergency Management Agency's risk management, mitigation, and insurance programs. Thank you for the opportunity to testify today about the National Flood Insurance Program.

As mentioned, for over 50 years, the NFIP has provided more than 5 million policyholders with \$1.3 trillion in flood insurance in more than 22,500 participating communities in all 50 States, the District of Columbia, and 6 territories. The NFIP has grown to be the largest single-peril insurance operation in the world.

Yet, in the advent of every hurricane or rainy season, I worry, knowing that despite all our best efforts we will most likely see more disaster suffering resulting from flooding, the number one natural disaster in the United States, because too many policyholders will not have the financial support that a flood insurance policy provides to begin their recovery journey.

A look at the Nation's flood loss experience over the past 17 years tells us that we can and must do better. It is imperative that we bolster investments in resilience, and break the cycle of life-altering disaster impacts on individuals and communities with limited capabilities to build back.

Nature is not waiting for us to act. The frequency and intensity of storms is rising across the country. Flooding and coastal storms account for roughly 70 percent of all Presidential disaster declarations over the past decade. In 2020, the Nation saw 47 major disaster declarations, involving every kind of natural hazard, and 22 events with losses that exceeded \$1 billion each. For comparison, the previous high was 16, in 2011 and 2017.

Inaction will exacerbate risky development in floodplains—low take-up of flood insurance coverage, mounting NFIP debt to the U.S. Treasury, and ballooning supplemental appropriations, and the cycle of needless disaster-related suffering will continue.

Like many of you, I have walked through leveled neighborhoods after major disaster events. Each time I come away asking, how much more can we bear? Over the past few years, under our own authorities, FEMA has undertaken several internal operational improvements to transform the NFIP, to reduce complexity, and increase transparency and fairness.

Most recently, on April 1, 2021, FEMA formally released Risk Rating 2.0, Equity in Action, a new pricing methodology with equitable pricing, and an individual's property's unique risk. The NFIP's rating methodology has not been updated in more than 40 years. Over the years, we have heard the calls for change from many corridors, to include key stakeholders, industry, Government partners, the media, and Members of Congress. While we understand the change is difficult, now is the time.

The current system is severely flawed, if not broken. Rates are going up under the current pricing methodology for all policyholders, and will continue to do so year after year if no action is taken. Risk Rating 2.0 lets us evaluate risk for each individual property, and unlike the current system, rate increases stop once a property reaches its true risk rate. Risk Rating 2.0 fixes the inequity of policyholders with low-value homes, subsidizing policyholders with higher-value homes.

Risk Rating 2.0 fixes inequities identified by GAO-12, which states that policyholders are not paying a premium reflective of their true risk. GAO analysis across the continental U.S. identified that the practice of aggregating risk across zones results in pricing that does not accurately reflect flood risk. And Risk Rating 2.0 lets us adapt and readjust rates based on a changing and unpredictable climate.

Now this is just one solution to a multipronged approach to reforming the NFIP. There is more work to be done so that we have a sustainable program, built to withstand an unpredictable weather system, one which is easy to understand, accountable to taxpayers, and is accessible for everyone, especially with financial barriers to purchasing a policy.

Right now we simply are not seeing the outcomes that we need, to close the insurance gap across the country, protect the natural and beneficial functions of the floodway, and promote judicious de-

velopment, all to make our communities safer and more resilient. Our ability to exercise continuous improvement of the NFIP begins with the certainty associated with a multiyear reauthorization of the NFIP with meaningful reforms by September 30 of 2021.

For your consideration, FEMA has developed four guiding principles that we believe will lead to meaningful transformation.

First, increased flood insurance coverage by ensuring more Americans are covered, by establishing a means-tested assistance program for one- to four-family primary residences.

Next, build climate resilience by transforming the communication of risk and providing tools to Americans to manage their flood risk.

Third, reduce risk losses and disaster suffering by strengthening local floodplain management minimum standards and addressing extreme repetitive loss properties.

And fourth, institute a sound and transparent financial framework that allows the NFIP to balance affordability and fiscal soundness.

Chairman Brown, I respectfully ask that this Committee consider these principles in your ongoing reauthorization discussions on how best to reform the NFIP, to ensure its financial sustainability, and reduce disaster suffering, especially for vulnerable citizens and communities. FEMA stands ready to assist in any way that we can.

In closing, FEMA is honored to be a part of finding the solution to combat insidious peril of flooding. It is more than just my job, sir. My passion and determination are vested in providing a safe future for every American, including my nine grandchildren. I look forward to answering your questions.

Chairman BROWN. Thank you, Mr. Maurstad, for your insight and for the four points I think are especially important. This is an issue, that you can see, sitting around this table and watching the history when you have been part of this for several years, this is an issue that is especially a partisan issue at all. It is regional, but it is much more than that too. Thank you for that.

Since Katrina, the NFIP has paid the U.S. Treasury about \$400 million per year in interest on NFIP's debt, over \$5 billion interest so far. Your predecessor, some three, 4 years ago, told this Committee that FEMA would have no practical way to repay that debt. In your opinion, what effect does this debt have on the program? What effect does FEMA paying interest on the debt have overall in this program?

Mr. MAURSTAD. Well, quite frankly and candidly, the debt and the interest associated with it is an anchor around the neck of the NFIP. The over \$5 billion in interest that the program has paid to the Treasury, over the last 15, 16 years, have had little benefit to the program and to policyholders. In fact, it seems to me to be morally suspect to be using premium dollars that are paid today, using a portion of those premium dollars, to pay for interest on a debt that was accumulated by paying valid claim payments to policyholders in past year.

So the \$450 million of interest that is paid every year can certainly be put to better use in the program, in other aspects of the program, whether that be flood mitigation, whether that be increasing commitment to reinsurance, or other aspects of the pro-

gram, whether it be floodplain management or the risk identification and mapping part of the program.

Chairman BROWN. Thank you. It is critical that FEMA map the Nation and provide projections of future flood conditions, because when communities make decisions about where and how to build, they need these maps. I thought Senator Toomey's comments about mapping were particularly incisive, that it is essential but it is only a step. It is not the end reason we do it.

At the current rate of funding, how long will it take FEMA to finish the job of mapping the country and give families and communities better understanding of their current and future risks? Would additional investments in mapping help you complete that job?

Mr. MAURSTAD. Well currently we have about 81 percent of the Nation has new, validated engineering maps. By statute, we are required, every 5 years, to determine whether a community's map needs to be updated. Many maps do not need to be updated because the conditions in those communities have not changed. A lot of the area that is not mapped is in lower-populated, sparsely populated areas.

And so certainly we are going to continue to look at getting to 100 percent, but we also want to look at what changes that we can make to better communicate flood risk. And so we have inaugurated a new initiative, the Future of Flood Risk Data, that will allow us to better depict the flood risk in the 22,500 communities, in a graduated fashion.

Instead of fixating on the 1 percent annual chance flood, the line on the map that says, you know, if you are on this side of the line you are at a high risk to our minimum Federal standards, and if you are on the other side of the line you low to moderate risk. If you are on the high side, you are required, if you have a federally backed mortgage, mandated, to buy a flood insurance policy, so you need it. If you are on the other side and it is not required by the Federal Government, unfortunately many people do not believe they are at flood risk and they do not need it.

And so we need to move away from that fixation of the line on the map, 1 percent annual chance, and give a broader depiction of flood risk in the communities, including looking at what future conditions need to be considered in a particular community, because of the change of climate.

Chairman BROWN. Thank you. My last question follows up on what you said for how important it is to better communicate flood risk. Talk briefly what we should do about that. Should Congress consider requiring flood risk disclosure to prospective home buyers or renters? Too often after disasters we hear news stories of families saying they had no idea they were building their home or buying a home in a floodplain, or starting their business there. What can we do to make that better, to communicate that risk?

Mr. MAURSTAD. Yeah, well, you are absolutely correct. I mean, there are a couple of things you are always going to hear after a major flooding event. Number one is, "I didn't realize I was at flood risk and I wish I would have had a flood insurance policy." I will go into a neighborhood and we maybe have three homes there with flood insurance coverage, and as I walk the rest of the neighbor-

hood the other six or seven homes on that block do not have the coverage. And so closing that insurance gap is critical, and all the steps that we take need to be focused on what can we do to make sure we have more insured survivors after flood events.

And then another consistent is what you have outlined, and that is, "I didn't realize that my property had flooded before until it flooded this time, and I wish I would have known that at the time that I was considering buying this property."

And so I do believe that the Committee should consider disclosure of flood risk, and look for ways that it is appropriate for the Federal Government to look at making sure that home buyers, business owners/buyers, property buyers understand and know what the flood risk of that property is, including previous flood damage.

Chairman BROWN. Thank you, Mr. Maurstad. Senator Toomey.

Senator TOOMEY. Thank you, Mr. Chairman. Mr. Maurstad, thanks again for joining us. As you know, moral hazard is an intrinsic problem with any insurance product, and flood insurance is no exception. When homeowners and communities are protected from the financial risk of an event they have less of an incentive to manage that risk. I am not saying it is true of all insurance, but it seems to me this phenomenon is significantly aggravated if the insurance is subsidized, as it is for NFIP.

I think about the repetitive loss and severe repetitive loss properties in particular. These are properties that have repeatedly flooded over the years, and then repeatedly been rebuilt with taxpayer money. And these properties, I believe, have had about \$17 billion in NFIP claims over the years. That is repetitive loss and severe repetitive loss properties.

So when I look at these numbers I worry that the NFIP program, in its current form, does not really appropriately manage this moral hazard. And so my question for you is, do you agree with the idea that the NFIP's historically generous subsidies make it harder to manage what I am calling this moral hazard, and especially this tendency to build and rebuilt in flood-prone areas?

Mr. MAURSTAD. So I think I would particularly like to address the issue associated with what excessive loss properties, repetitive loss properties, severe repetitive loss properties—quite frankly, we have too many definitions of the same issue, and it would be good if we could focus in on one definition. And certainly the excessive loss property situation and issue has been around for decades. Congress attempted to address this issue in the 2004 reauthorization of the program. Unfortunately, it came up with a manner in which to do it that was too complicated and cumbersome for communities to enact.

So we do want to work with the Committee and look at ways that we can address the situation of properties. I think it is common sense that at some point in time if you have had a certain number of losses and you have taken no mitigation action to do it, that maybe the Federal insurance program should not be available for you.

Senator TOOMEY. So just to be clear, I think you said this in your opening statement, but is it your view that implementing Risk Rat-

ing 2.0 is a step in the right direction, a step in improving the fairness and the effectiveness of the NFIP?

Mr. MAURSTAD. I mean, there is no question. It is a transformational leap forward. Quite frankly, the way that we have been doing it, while it is built on actuarial principles, is actuarially sound, was developed on those principles that were back in the 1970s—you know, I have a friend that has got a 1978 Olds Cutlass that looks good, it sounds good, it runs well, but it is not a 2021 electric vehicle that can do things far better.

Senator TOOMEY. And contrary to what some people may think, I just want to underscore this point. From what I have seen Risk Rating 2.0 is not a universal increase in premiums. It seems to me it is more like a universal increase in fairness. And I say that because FEMA estimates that nearly 400,000 policyholders currently pay at least \$500 a year too much for their NFIP flood insurance. In my home State of Pennsylvania, there are 4,689 policyholders who are paying at least \$1,200 per year too much for flood insurance. And my understanding is that Risk Rating 2.0 is likely to reduce premiums for people who are overpaying, and therefore, that is part of the step in the direction of greater fairness. Is that a fair characterization, in your mind?

Mr. MAURSTAD. I mean, certainly when we first introduced Risk Rating 2.0 back in 2016, we indicated the reasons why we were doing that, and that is that some people were paying too much, some people were not paying enough, and some people were paying the right amount. And we needed to develop a system that would be able, on a risk basis—because your insurance should be correlated to what your risk is. And so that is what we set out to do, and I believe that is what we have accomplished, in making sure that a homeowner can know what they are paying is what they should be paying, based on the characteristics of their property and their risk, and that they are not paying—go ahead.

Senator TOOMEY. Thank you. And my last point, Mr. Chairman, consistent with this idea, there is a way to have a sort of independent verification of whether or not the risk pricing is as fair as it can be at that point in time, and that is to see how it compares to the private market, which is not subsidized and which is offering these services.

As I said, in Pennsylvania, 20 percent of flood insurance policies are private market. Are you supportive of a marketplace that includes competitive, private insurance?

Mr. MAURSTAD. Yeah. We have said, for at least 4 years now, when we set a goal within FEMA to double the number of properties covered by flood insurance, that that was not just with the NFIP, that there should be, and we hope, a continuing increase in flood insurance coverage in the residential market, private market, to help close the insurance gap. And so clearly there is plenty of room for both. I mean, when you look at the high-risk area, and only two out of six properties in the high-risk area are covered by either an NFIP or a private-sector policy, there is plenty of market out there for the private sector to play a larger role in covering the flood risk of America.

Senator TOOMEY. Thank you very much. Thanks, Mr. Chairman.

Chairman BROWN. Thank you, Mr. Toomey. Senator Menendez of New Jersey.

Senator MENENDEZ. Thank you, Mr. Chairman. Look, FEMA's Risk Rating 2.0, the agency itself says that 80 percent of property owners nationwide will see rate increases, and some of those will be compounded annually over the course of several years. Now I hear a lot from FEMA, and special interest groups, that we should keep raising rates on policyholders, that premiums are too low, they need to go higher, but this completely ignores the cost side of the ledger and fails to look within the program for savings and efficiencies that benefit the policyholders.

One of the biggest costs to the program is not paying out claims. The real drain on the program, in my view, comes from padding the pockets of insurance companies that bear none of the financial risk.

So, Mr. Maurstad, for every dollar of a written premium, how much goes to private insurance companies?

Mr. MAURSTAD. We have 65 of the leading property insurance companies that administer the program on behalf of the Federal Government, and currently 30 percent of the premium dollars are provided to them to administer the program.

Senator MENENDEZ. Thank you. Now let me ask you this. For FEMA to currently run that program in house, how much of the written premium does that cost?

Mr. MAURSTAD. So the direct side, which writes about 15 percent of the flood policies, compared to 85 percent of the policies that are written by the WYO—rough numbers, and we can get you the exact numbers—it is about \$30 million.

Senator MENENDEZ. Well, looking at it, I saw, as you said, 30 percent goes to the insurance company, 20 percent FEMA has to use to operate it, so that is 50 percent less than what the insurance companies receive. Why are we paying insurance companies 50 percent more than it would cost to do it in-house?

Mr. MAURSTAD. Well, the reason why is because that is what the statute and our regulations allow for. And as you are well aware, the 2012 reauthorization indicated that the agency should look at, and study, and come up with what is the proper amount to pay the WYO companies, based on what they are actual expenses are. And while it is taking too long, we are continuing to work on that regulatory process, and we will eventually look at what the appropriate amount should be to pay the WYO companies.

Senator MENENDEZ. Mr. Chairman, this is an area that we need to look at, because if we are paying 50 percent more than it would cost to operate in-house, my bipartisan (NFIP-RE) Act takes the commonsense approach, and it would require FEMA to compensate the insurance companies the same amount it costs FEMA, to serve as the program itself. I think it is fair to compensate our hard-working agents at a minimum of 15 percent, but this 50 percent is a huge cost. We are talking about hundreds of millions of dollars.

I am glad to hear the Chairman raise the question of NFIP debt and your response. Four hundred million dollars a year in interest—that is in interest—that is 10 percent of the written premiums the NFIP takes in. No program could be solvent with 10 percent debt service. And your bill also tackles this issue by freezing inter-

est payments and putting those savings into mitigation. And it is fair to say that mitigation has a multiple effect. For every dollar we spend on mitigation, there is how many dollars that we save?

Mr. MAURSTAD. Six to one.

Senator MENENDEZ. Six to one. I like anything the Federal Government could do that six to one at the end of the day.

Legal expenses. Policyholders' premiums are also footing the bill for the insurance industry's high-priced defense lawyers. Systemic abuses were uncovered after Superstorm Sandy, where the Nielsen firm capriciously ran up legal defense fees. This led to the NFIP to cover \$60 million worth of fees, and could have reached \$100 million if FEMA had not stepped in.

One judge called Nielsen's actions "reprehensible." Mr. Maurstad, why don't we have Government attorneys handle these cases, like they do in virtually every other Government program?

Mr. MAURSTAD. Sure. So since Sandy was put in place we have done some things to improve the claim handling process. One was we set up an appeal branch that is separate from the claims branch, so that if a policyholder has issue with the way their claim was handled there is a firewall between the claims handling part, and they can make an appeal to the agency. We can go through that process.

We have also put in place a new litigation program, where we oversee and manage the litigation of not only those that are written in the direct but with the WYO. And we can provide you with the specificity associated with the litigation reforms that we have put in place to address the issues that you have raised.

Senator MENENDEZ. Well, I think the Government should be doing this.

Mr. Chairman, since this is such a critical issue to New Jersey, I think what I find even more frustrating is that we call Risk Rating 2.0 equity in action, when I think this new rating system is anything but equitable.

Keansburg, New Jersey, home to just over 10,000 people, nearly 2,000 NFIP policyholders. It is town made of hard-working families, blue collar, median household income of \$52,000. This is a town that lost everything after Superstorm Sandy. Under Risk Rating 2.0, 90 percent of policyholders in Keansburg would be seeing premium increases in the first year, and the increases continue to compound in years to come.

Now the one thing about insurance, as you know, Mr. Chairman, is that it is about spreading the risk over the widest pool. And more expensive this insurance becomes, the less the pool that will exist, and the premiums will continue to go up as there are less people in the pool, not to mention the ratable losses for communities across the Nation who, if you cannot sell the property at the end of the day because you cannot afford flood insurance, the dramatic effect on a ratable basis.

So I appreciate the Chairman having this hearing, and we look forward to working with you to try to meet some of these challenges. Thank you.

Chairman BROWN. Thank you, Senator Menendez, for your thoughtfulness on this issue, for years. Senator Kennedy——

Mr. MAURSTAD. Mr. Chairman——

Chairman BROWN. Yes, Mr. Maurstad.

Mr. MAURSTAD. May I respond?

Chairman BROWN. Of course. I am sorry.

Mr. MAURSTAD. So the Senator is right. Eighty percent of policyholders will see their premiums go up. Right now, if we did nothing, 100 percent of them would. There are 217,000 policyholders in New Jersey that are going to see a decrease in their flood insurance rates, at an average of \$85 a month, with Risk Rating 2.0. Then there are another 137, or 65 percent, that are going to see an increase on the same level of an increase that they would see if we did nothing.

And so he is absolutely correct. We just are looking at the numbers slightly differently. And for that reason we believe, when it is based on risk and the individual property characteristics, that we do have a methodology that is more equitable and fair.

Senator TOOMEY. I would be happy, at some time, Mr. Chairman, to go over the numbers. I will not delay my colleagues here today, but there is a real impact for a very large number of people, and it not only the impact, it is the size of the impact. Thank you.

Chairman BROWN. Thank you, Senator Toomey. Senator Kennedy from Louisiana is recognized for 5 minutes.

Senator KENNEDY. Thank you, Mr. Chairman. Thank you, Mr. Maurstad, for being here today.

You are not clairvoyant, and I am certainly not clairvoyant, so I can just share with you what I have observed so far. I think with respect to Risk Rating 2.0, I think you are presiding over tire fire. I think the rollout of Risk Rating 2.0 looks like a ferret fire drill.

I mean, here is what I hear FEMA saying. We created this program in 1968. FEMA has the authority to assign premiums. We, FEMA—I hear you saying—all these years have been doing it wrong. We have assessing risk wrong. And now we, FEMA, have had an epiphany, and we have figured out how to look at every individual property, out of all the properties in the United States of America, and assign the risk for that particular property. But we are not going to tell you how we are going to do it. In fact, we are going to require the insurance companies who are implementing Risk Rating 2.0 to sign a gag order. We are not going to promulgate a rule. We are not going to allow for public comment. We are just going to do it, because we are smarter than the people who pay the premiums, and we are smarter than the U.S. Congress.

Now I need you to explain to the policyholders of American right now, not in gauzy platitudes—no disrespect, Mr. Administrator, but I feel strongly about this. Because you are not waiting. You are going to pull the trigger in August. I need you to explain to them this epiphany that FEMA has had, and how, if you look at a particular property, you are able now to assign, with specificity and accuracy, flood risk, when all these years you did it wrong. Tell me what you did wrong and tell me how why it is going to be accurate.

Mr. MAURSTAD. So fundamentally the methodology is different. Previously, we looked at rating policies based on a zone—

Senator KENNEDY. I get that part. I am sorry to interrupt you but I only have 5 minutes. I get the part. You are saying I can look at Senator Brown's property, now that we have had this epiphany, and we have talked to consultants, and know specifically, on his

property, what the risk is. How? What new factors are you considering? How are you going to do it?

Mr. MAURSTAD. So we do not have much time, and I would just point you to the document that we put on the website, that, in essence, is the same as an insurance rate filing that a private insurance company would provide to a State insurance commissioner that would be able to validate the methodology associated with the rates that they were going to charge. So I would——

Senator KENNEDY. How are you going to do it?

Mr. MAURSTAD. So that document shows how, and explains how we do it. We, in essence—the simplified form would be we are using three different commercially available cat models. We have developed two——

Senator KENNEDY. Who developed the models?

Mr. MAURSTAD. One of them is AIR, one of them is CoreLogic, and the other is CATRisk. We combined that with two——

Senator KENNEDY. Has the public—I am sorry. Go ahead. Excuse me.

Mr. MAURSTAD. We combined that with two Government-developed, FEMA-developed cat models, and then we added replacement cost information, that we get from CoreLogic, that all the regular insurance companies use.

Senator KENNEDY. Let me stop you because I have got 30 seconds, and I am sorry, Mr. Maurstad. I really apologize. I am going to ask the Chairman to hold another hearing on this.

OK. You have got some consultants and they have developed models. I get that part. They have not been tested. You have done no rule. You have done no public comment. Nobody has been allowed to weigh in. Policyholders have no idea what you are talking about. You know what I have discovered about consultants from predicting the future? For every consultant there is an equal and opposite consultant, and oftentimes they are both wrong, and a lot of them, their accuracy is about as good as those late-night psychic hotlines on TV. And you have done this in secret, and it is not right.

Mr. MAURSTAD. Well, sir——

Senator KENNEDY. And we do not know whether you have considered other alternatives, as Senator Menendez—I am almost done, Mr. Chairman—as Senator Menendez talked about. Are we paying the insurance companies too much? Is 30 percent off the top too much. Why aren't we doing a better job of requiring people who are supposed to have insurance to have the insurance? What about some of these consultants that I have talked to FEMA about, that you could persist in hiring? They are thieves?

Mr. MAURSTAD. Yes, sir. So all——

Senator KENNEDY. None of this has been addressed.

Mr. MAURSTAD. ——all good points. I look forward to having further discussion with you on all of it. I know how important the National Flood Insurance Program is to your State. Over the past 16 years there have been 260,000——

Senator KENNEDY. But I want you to understand, Mr. Maurstad, because I am going to get cutoff——

Mr. MAURSTAD. ——policyholders——

Senator KENNEDY. In my State we are not talking a bunch of wealthy homeowners who have a second and third beach house. These are working people. They get up every day, they go to work, they obey the law, they try to do the right thing by their kids, they try to save a little money for retirement. Their biggest investment is in their home, and now you are doing this to them without explaining it to them?

Mr. MAURSTAD. This will—

Senator KENNEDY. And we wonder why Congress and the Federal Government ranks in polls right up there with skimmed milk?

Mr. MAURSTAD. Risk Rating 2.0 will assist exactly the people that you are talking about. Two-thirds of the homeowners that have subsidized homes are going to see a reduction in their premium. Currently, low-value homes—

Senator KENNEDY. Eighty percent of my people—

Mr. MAURSTAD. Currently low-value homeowners are subsidizing high-value homes. This program addresses the concerns that you have—

Senator KENNEDY. But you have got to explain why, Mr. Maurstad.

Mr. MAURSTAD. Back to the—

Senator KENNEDY. There is a lot of distrust of Washington. You have got to explain why. You cannot hide your consultants. In front of God and country and policyholders, you have got to say this is the methodology. Now let's test it through debate.

Mr. MAURSTAD. So let's clear the consultant issue, first of all. FEMA has been working on this for 5 years, thousands of hours. It is probably not a well-known fact, but FEMA has some of the best flood, catastrophic actuaries in the country.

Senator KENNEDY. Then we ought to test them in public.

Mr. MAURSTAD. They are top notch.

Senator KENNEDY. Then they ought to be tested in public.

Mr. MAURSTAD. —data—

Senator KENNEDY. They ought to be cross-examined.

Mr. MAURSTAD. In addition to we did use three cat models, the same cat models the reinsurance industry uses, to price their product.

Senator KENNEDY. Then why is FEMA trying to hide—

Chairman BROWN. Please wrap up, Senator Kennedy.

Mr. MAURSTAD. We are not hiding anything.

Senator KENNEDY. I told you he was going to cut me off. Then FEMA should not hide. They should not hide your work. Show your work.

Mr. MAURSTAD. We post more information on the website than what has ever been posted before. I point you to our website—

Senator KENNEDY. Right.

Mr. MAURSTAD. —where State profiles—

Senator KENNEDY. That is the answer. That is the answer, a website.

Mr. MAURSTAD. Well, sir, and we have done 450 stakeholder engagements since March 1.

Senator KENNEDY. Why did you make the—

Chairman BROWN. Senator Kennedy, your time has expired. You have gone over 8 minutes. Senator, we can do a second round if you want to stick around.

Senator KENNEDY. Thank you, Mr. Chairman.

Chairman BROWN. Senator Warren is recognized for 5 minutes, from Massachusetts.

Senator WARREN. So thank you, Mr. Chairman, and thank you for holding this hearing today.

There is no dispute about the basic facts. Sea levels are rising and storms are becoming more intense and more frequent. In Massachusetts, we recently learned that Boston Harbor Islands are at risk of being lost to rising tides, and 1 day soon the same could be true of many of our coastal cities and towns.

Our communities rely on FEMA's flood maps to help gauge the risk. It is easy for residents to presume that if they live outside the invisible line on the map that designates the flood zone then they do not have to worry. And if their home is inside that line then they are at higher risk.

The problem is we are beginning to learn that is a very dangerous assumption. Some of these maps have not been updated in decades, but even for maps that are up-to-date, they may not be providing an accurate assessment of the risk.

So here is what I want to ask about, Mr. Maurstad. We know that flood risk areas are rapidly expanding because of climate change, but FEMA's maps do not incorporate projections of future conditions, such as rapidly rising sea levels. So let me ask you what FEMA is doing to try to make sure that all communities have good information, not just about past risk but about future risk.

Mr. MAURSTAD. Right. So you are absolutely correct in all of the statements that you made, and right now FEMA only has the statutory authority to map the 1 percent annual-chance event. It is a minimum Federal standard that was set back in 1968, when the Flood Insurance Act was put in place, and at that time there were statements, and the intent was to evaluate that standard on a regular basis.

We still have that minimum Federal standard. I believe that ought to be looked at. It also ought to be looked at as to whether or not FEMA should have additional authority to map future conditions as a result of the things that you are talking about. But in the meantime we have put in place a Future of Flood Risk Data, where we are working with the Technical Mapping Advisory Commission and using their recommendations on how we, within our current authorities, develop nonregulatory products that will help communities better understand their complete flood risk, and not just their flood risk from the 1 percent annual chance.

Senator WARREN. That is very helpful, and I appreciate it, and I appreciate your point that we need to make some changes around here in your authorizations.

Our communities need maps that tell them more than just a story about the history of floods, and we need the NFIP to change the perception of flood risk as either you have risk or you do not have risk, and if you are outside the zone you don't need to worry about it.

So I am very glad to see that you are moving toward a graduated assessment in terms of risk, instead of using a binary approach here. I think that is going to help families better understand the risks that they face. But we just need to make sure that we turn this plan into action and that families that live just outside flood zones actually are participating and understanding what is going on here.

So let me ask you this part. Mr. Maurstad, do you believe that mortgage lenders should bear a greater responsibility for informing homeowners of their graduated flood risk, and if so, would you commit to working with lenders to make sure they are living up to this responsibility?

Mr. MAURSTAD. So I absolutely commit to working with them. We already with them. They, of course, are responsible for enforcing the mandatory purchase requirements, and I appreciate your remarks because we have been trying for years now to get people to not be fixated on in or out, line on the map, required or not required, but to really look at their flood risk. Risk Rating 2.0 will actually help that, because it is going to give a better indication of what the risk is in a community, in a graduated basis. So price is one of the best signals for what your risk is. Risk Rating 2.0 will help in the situation that you are talking about.

And so yes, if we can work with ways where the lending community can embrace the graduated risk, we will do everything we can to help.

Senator WARREN. And I take it from your answer you are saying yes that you think mortgage lenders should bear some responsibility in this?

Mr. MAURSTAD. I think they do. Can they take more? Yes.

Senator WARREN. Good. That is what I wanted to hear. You know, climate change is making flood risk worse with each year, and our homeowners need NFIP coverage to protect their families. We just have a real responsibility to inform them accurately about what those risks are.

We also have a duty to mitigate flood risks by tackling climate change head on. Today our coasts and islands are in grave danger, and tomorrow our cities and towns will be in grave danger. We need to act before then. Thank you.

Mr. MAURSTAD. There is no question that flood risk in America is underappreciated, and we need to do a better job of making sure that we develop a culture of preparedness so that we can build resiliency with individuals and communities and reduce disaster suffering.

Chairman BROWN. Thank you, Senator Warren. Senator Rounds from South Dakota is recognized for 5 minutes.

Senator ROUNDS. Thank you, Mr. Chairman. Well, flood occurs in South Dakota just like it does in other parts along the coast. It is a different kind. It is primarily because of, in some cases, the Missouri River, which has the mainstem dams of the Missouri—or the mainstem dams are there and yet while we do our best to provide for flood control, sometimes Mother Nature takes the upper hand. And so to us, in the central part of the country, it is important as well.

I would like to ask you a question about coverage limits, to begin with, sir. In my prior life I was also a property and casualty agent, and our agency would market Write-Your-Own policies from different companies, who did a very good job for us. But there were many cases in which we looked at the way that flood insurance was written and marketed versus the way other traditional types of insurance were, and we do some things in the national flood program that no normal insurance company would ever do, such as limiting the total amount of coverage but not insuring to value, necessarily, or perhaps not looking at coinsurance clauses, and so forth, while, at the same time, not developing the premium necessary to actually cover the expenses involved.

One of the areas that I was curious about exploring, with any new flood insurance product or renewal would be whether or not we could actually come out ahead in the game if we allowed for higher limits of insurance with appropriate additional purchases of premium, in the least dangerous flood-identifiable areas, so that we could actually increase the total premium dollars being brought in versus not significantly increasing the risks involved for the program.

Would you comment on that for me please, sir?

Mr. MAURSTAD. Sir, and thank you, Senator. It is good to see you again. Our paths first crossed when I was the Regional Administrator out in Region 8, and you were Governor. I am also a former agent, and so we share that in common. And certainly the issues that you raise are valid ones. We are working on those.

You know, another little difference in NFIP policy and your private sector policy or your homeowner policy is you have to buy a flood policy on your dwelling and you have to buy a separate policy on your contents. We are working on developing new policy forms to combine those, make it more like the homeowner policy, easier for agents to sell, understand, be less complex, better understood by policyholders.

And yes, the limits have not been changed since the early 1990s, and so I believe that during the reauthorization process we should look at what is the appropriate limit for NFIP flood insurance in the next go-around. It certainly is one where we have seen the number of our policies that are at the max, \$250,000 limit for a residence, has increased steadily, and I will get you the exact number but I think it is well over 50 percent, or at the maximum limit, which indicates there is a need there.

Senator ROUNDS. Well, just as an example, and the reason why I think some people say, well gee, all they are trying to do is increase the total amount of losses paid out, with the flood insurance you pay first dollar out. And so if your risk is based upon a valued property may very well be a half-a-million dollars in value, if you are always going to take the first \$250,000, no matter what happens—and most flood insurance losses are not total losses—you have first dollar exposure and yet your premium is developed only on a \$250,000 risk, where the risk really is significantly higher in terms of total value of the loss. And it simply is not something that any of the rest of the insurance industry has ever found a successful way of underwriting in the past.

Mr. MAURSTAD. Yeah. Part of the change that we are making in Risk Rating 2.0 is using replacement cost as one of the measures of how you determine the premium. That is part of what balances out the inequity in low-value homes and high-value homes. And so you are correct, and I think we are on the right path to address some of your issues.

Senator ROUNDS. Thank you, and I would note for the record that I actually have a flood insurance policy on my home, and it was amazing to me that the value on my home would be greater than the \$250,000, my premium is based on a \$250,000, but most certainly, in any other type of insurance product they would never allow me to have \$250,000 in coverage on that home if I was not insuring it to value. And I think that is something that would increase my premiums, but it most certainly would be a lot more stable product within the market if we appropriately priced it.

Mr. MAURSTAD. Yeah, correct.

Senator ROUNDS. Thank you. My time has expired. Thank you, Mr. Chairman.

Chairman BROWN. Thank you, Senator Rounds. Senator Smith of Minnesota is recognized.

Senator SMITH. Thank you, Chair Brown, and thank you so much for this hearing today. I appreciate it. And thank you, Mr. Maurstad.

So in Minnesota you do not need to convince folks about the reality of climate change. We see it in more and more extreme weather events and wildfires and in dramatically fluctuating water levels on our lakes. In fact, climate change impacts are more extreme in Minnesota than in a lot of other places.

One of the things that we are seeing more and more of are pluvial flooding, which is what happens when you have a massive amount of water dumped from a big storm all at once, and there is just no place for that water to go. We are seeing an increase in this kind of flooding also in Minnesota, and bigger storms and more of them. So it is good to see that this kind of flooding would be included in the Risk Rating 2.0 strategy. This is going to make a lot more Minnesotans eligible for coverage, and it is also good to see that Risk Rating 2.0 will be tying premiums to that specific property's flood risk rather than just sort of assigning a broad zone.

I also just want to say, you know, there is going to be an increased demand for better, stronger surface water management and mitigation strategies on top of everything else.

But Mr. Maurstad, could you just talk a little bit more about how NFIP will be evaluating these future pluvial flood risks as these events become more and more frequent with climate change?

Mr. MAURSTAD. Sure. I mean, how is Risk Rating 2.0 better? It is better because it incorporates new variables into calculating what the premium is. So instead of just the 1 percent annual chance one event and your elevation and the type of structure, it is now flood frequency, multiple flood types, as you have mentioned, whether it be river overflow, storm surge, coastal erosion, heavy rainfall, which has not been a part of factor in the past, distance to a water source, of course elevation and cost to rebuild.

So it far more encompasses the entire realm of flood risk, which is part of the reason why it is more equitable for the program.

Senator SMITH. Right. And you are trying to balance premiums that do a better job of covering the overall cost, and also trying to balance encouraging more people to participate, right?

Mr. MAURSTAD. Yes. I believe that because of the new change in pricing methodology we will see more policyholders, because they will now better understand they are at risk, and in addition to that, I think that the method by which the agents are going to sell the policies is going to be easier and simpler. Instead of going to a manual as big as this deck and trying to pencil out what your premiums are going to be, we have developed a rating engine that everybody will be able to tap into, be able to tell you what your premium is. It will be uniform across the country, far easier for the agents. I think we will see more agents involved in the program because of its simplicity, and because of that we will see more homeowners, small business owners buy the necessary flood insurance they need, and will reduce disaster suffering.

Senator SMITH. And that expands the overall pool, which is a good thing.

Mr. MAURSTAD. Correct.

Senator SMITH. So this is a big issue in Minnesota, where we pride ourselves at often being at the top of most metrics, but unfortunately we are not at the top when it comes to flood insurance participation. Only 0.4 percent of eligible properties in Minnesota receive coverage under the flood insurance program, and only 7.6 percent of Minnesota structures in high-risk floodplains are carrying flood insurance. So we want more of those folks to be participation.

Now I think adding pluvial flood risk will help, but we need to do something dramatically different. And I think that the changes that we are going to be seeing in Risk Rating 2.0 will be very helpful to Minnesotans. But could you talk a little bit about what education efforts you think that we need to ensure that homeowners, small businesses, homeowners especially living newly declared flood zones, are aware of the changes and now what is going on?

Mr. MAURSTAD. Well, I mean, of course with 22,500 communities we work with associations, the Association of State Floodplain Managers, for example, in making sure that floodplain managers understand. We are doing training for them. We are doing training for agents. We have already trained about 2,400 agents. We are doing training every week from now through the summer, where more agents will be trained.

We rely on realtors, lenders, but realtors have been very involved and are certainly supportive of the direction that we are moving. And so realtors help. It is a whole community approach on how we can do a better job of getting people to understand their flood risk so that after that flood event that is going to happen—98 percent of the counties in the U.S. have had a flood event—more people have the coverage they need to be on the road to recovery.

Senator SMITH. Thank you. Thank you so much, Mr. Chair. You know, I am encouraged that this Risk Rating 2.0 strategy I think is going to result in a more fair allocation of costs and a better correlation with risk, and that this is going to benefit Minnesota, even as the overall risks are spread out over a larger pool. So thank you very much.

Chairman BROWN. Thank you, Senator Smith. Senator Tillis of North Carolina is recognized for 5 minutes.

Senator TILLIS. Thank you, Mr. Chairman. Mr. Maurstad, thank you for being here. I think Risk Rating 2.0 is a great development. It is a shame that it is the first update since the Beatles were topping the charts, but at least it is here.

You know, in North Carolina, when I was Speaker of the House, we invested in mapping so that we had the best available data. I think we rank up there as some that probably have the best situational awareness. The question I have on the Risk Rating 2.0 has to do with the flood events that we normally experience a couple of days after a storm or a major weather event, that is not on the coast. We get the brunt of the impact of a hurricane on the coast, and then we get the brunt of flooding to our river basins in the eastern part of the State.

Do you think Risk Rating 2.0 is designed to leverage the best mapping information and to make available the program to the inland, at-risk areas?

Mr. MAURSTAD. Yeah. I think that absolutely that is the case. As I mentioned the different types but also there are many ingredients that go into Risk Rating 2.0. It is not just one factor that dictates how a property is going to be rated. And so we incorporate, as I mentioned before, the cat models. We incorporated the FEMA NFIP flood mapping that is so important, and the flood loss history, and the replacement cost, and the elevation. So there is a lot that goes into this new program.

As I indicated, it is all laid out in the over 200-page document that explains the methodology associated with Risk Rating 2.0. You have got to be an actuary or a Ph.D. to understand it, quite frankly, but it is there. And everyone is there to assess and evaluate it, which we hope people do. We did not do this in a vacuum. We utilized the private sector company that does this for major insurance companies across the country.

So, you know, there is no question in my mind that it will address the issue that you raised, but it will provide a more comprehensive approach across all of our 22,500 communities.

Senator TILLIS. With respect to moving forward with the NFIP reauthorization, what other kind of things should we think about to maybe incent other States? Again, I believe that North Carolina has done a pretty good job through our own State resources, but what else should we consider to make sure that you have the best information available? That is one.

And also, I am a part of a bipartisan workgroup that is focused on infrastructure, and one of the infrastructure components there is several billion dollars for resiliency. It would seem to me that with our better situational awareness over where the risks are that that should be a part of prioritizing the resources that we have, to make more resilient areas less likely, maybe even get them to a point to where they have a lower risk rating. So I think that is something to think about if we are successful with the infrastructure bill.

But what more should we be thinking about as we move forward with the reauthorization of the program, tools, and priorities?

Mr. MAURSTAD. Well, I mean, certainly the incentives associated with a community rating system, that provides discounts to those communities that adopt higher standards and do other endeavors that either provide better information or mitigation or reduce the risk within their community. So we are going to continue to evaluate the community rating system program, make sure it does what it should do.

But we should also look at what are the other ways that communities can be incentivized to provide additional information when the mapping occurs, which we are, quite frankly, going to move away from as we look at how we generate flood risk data, and how we can have communities now, any information they bring we certainly incorporate. But what can we do to incentivize them to provide more information, put more skin in the game, so to speak, to make their maps—because they are not our maps. They are the community maps. The communities adopt the maps—as relevant as possible.

Senator TILLIS. Thank you for that. Mr. Chairman, I think Senator Cortez Masto is wondering why I am sitting in her seat. I got confused too.

Chairman BROWN. Someone needs to inform Cortez Masto the Democrats are in the majority now. I think she knows that.

[Laughter.]

Chairman BROWN. So we flipped sides. Sorry to walk in front.

Thank you. Do you want to start a second round with Senator Kennedy, or are you ready, Senator Cortez Masto?

Senator CORTEZ MASTO. I am ready.

Chairman BROWN. OK. Then Senator Cortez Masto is recognized for 5 minutes.

Senator CORTEZ MASTO. Thank you. I so appreciate the opportunity, and please, excuse the delay. I was in another hearing this morning, as you can see.

So let me ask a couple of questions here. In certain areas of Nevada, such as Washoe County, which has experienced heavy flooding in previous years, some community maps are seriously out of data, and letters of map revision by the community are the only way these maps are being updated. My office has received some feedback that this revision process is cumbersome on the community level and very expensive on the individual level.

So can I ask, what are the consequences to taxpayers and to policyholders when we have outdated maps, number one, but also too, what progress has FEMA made in implementing reforms that would make it easier and less costly to appeal a map?

Mr. MAURSTAD. So when it comes to outdated maps, as I indicated we are required, every 5 years, to address whether or not a community's maps need to be updated. Our regional offices work with communities to determine that and go through that process. And if there is change then we start a new map evaluation on those.

So I think that the maps are not as outdated as what some folks might think. There certainly are some that are. And we want to work with communities, and we will work with community that want to have their maps updated. Generally speaking, communities do not want us to have their maps updated. But we certainly will

work with communities that want to have their maps updated to make sure that they can be as useful a tool as possible in managing the floodplain in their community, and managing development in the high-risk areas. So that is the updated issue.

What can we do more to simplify the process, we are looking at ways that that can be done. It is a public process that is laid out, quite frankly, so that the community and members of the community can participate in that change process. But we are——

Senator CORTEZ MASTO. How long is that process going to take?

Mr. MAURSTAD. How long does it take? It varies. Let's say in those circumstances where there is a hard time coming to agreement on the map, it can take 5 to 7 years. So we need to look at ways where, in those circumstances, it can be simpler, and we are open to those ideas.

Senator CORTEZ MASTO. Thank you. The other thing I come across is a 2012 study by the GAO that noted that FEMA has not placed a high priority on mapping rural areas, including many Tribal areas, for flood risk, and most Tribal lands remain unmapped. Now that was a 2012 study. Is that still accurate today?

Mr. MAURSTAD. Most of the maps that do not meet the new validated engineering standard are in less-populated areas, and that is a resource issue in which we work with each of the regions in identifying the areas that need to be mapped in their region that would have the greatest impact to the National Flood Insurance Fund. And so those areas have lagged behind. We continue to want to work to address those, and I appreciate the continued support of the mapping appropriation for the program, and we are committed to making progress in those areas.

Senator CORTEZ MASTO. So let me ask you this, because it sounds like it is still accurate, the 2012 study. And what I am also hearing is that the Tribes may lack the resources and administrative capacity that they need to administer the National Flood Insurance Program requirements, and NFIP premiums are often too high for low-income Tribal members.

So are you looking to address and work with the Tribes specifically, and if you are, how are you doing so?

Mr. MAURSTAD. Yeah. So let me take that back and we will get you a more robust answer than I can provide right now. But certainly we are committed to assisting those vulnerable communities to be able to fully participate in the program, and again, would be open to ways that we can achieve that. Certainly the means-tested assistance program to help those that earn 85 percent or less of the average mean income that is being proposed by the Administration would help with the affordability issue that you have mentioned, on Tribal lands. And so I think that will also be of help in getting more low-income individuals that are at flood risk to have the necessary coverage they need.

Senator CORTEZ MASTO. Thank you.

Chairman BROWN. Thank you, Senator Cortez Masto.

We will begin a second round. We have votes at 11:30, so, Senator Kennedy, if you would make sure you keep it to 5 minutes. We may have a couple of other Senators coming back too. But proceed, Senator Kennedy, for 5 minutes, if you would.

Senator KENNEDY. Thank you, Mr. Chairman, and thank you again, Mr. Administrator, for being here.

You referenced, in answering Senator Tillis' question a private company that had quarterbacked this for you that is also a consultant to other insurance companies. What private company is that?

Mr. MAURSTAD. Milliman.

Senator KENNEDY. Milliman.

Mr. MAURSTAD. Yeah. And they did not spearhead this. They worked for FEMA, in helping us make sure that we are in line with the way that a private sector company would go about achieving a modern, risk-based, actuarially sound rating system.

Senator KENNEDY. Right. And how much did Milliman charge FEMA?

Mr. MAURSTAD. I will have to get back to you on that.

Senator KENNEDY. Was it \$10 million?

Mr. MAURSTAD. I will have to get back to you.

Senator KENNEDY. You do not know?

Mr. MAURSTAD. I will get back to you.

Senator KENNEDY. Was it more than \$10 million?

Mr. MAURSTAD. I am not going to guess, sir.

Senator KENNEDY. OK. Why didn't FEMA allow for public comment? You have had this epiphany and you have decided that after all these years you have been doing it wrong, and Milliman has now shown you how to do it correctly, why would you not subject that to public comment?

Mr. MAURSTAD. So not to be argumentative with you, sir, I mean, we were not doing it wrong for all those years. It was just a different time, and a different way in which to fundamentally price insurance. It was determined that we had inadvertently, over the years—

Senator KENNEDY. Yes, but not to interrupt you, why haven't you allowed for public comment?

Mr. MAURSTAD. As I said before, we have made all the information available. We are charged with the responsibility—

Senator KENNEDY. Yes, sir.

Mr. MAURSTAD. —charged with the responsibility of developing a risk-based, actuarially sound, site-specific pricing methodology. That is what you have told us to do, and that is what we have done.

Senator KENNEDY. But by your own admission, this 200-page report that you put on your website—I wrote down what you said here. You said you have to be an actuary to evaluate it. Did I misunderstand you?

Mr. MAURSTAD. No, sir. I mean, you would not have a plumber do an appendectomy either. I mean, it is done on the basis of the way in which a rating filing—

Senator KENNEDY. But don't you want people to understand the change?

Mr. MAURSTAD. So there are other tools that we have also put on the website also. We have put a Fundamentals of Risk Rating 2.0, we have put a video on there. So we have provided that information also, in addition to all the stakeholders that assist us in communicating our program—

Senator KENNEDY. Is Milliman going to put in a toll-free number, where people can call and say, "OK, here is my house at 26 Main Street, Bucksnot, America. You increased my premiums," because premiums are going to go up by 80 percent. They are. I mean, you might as well be honest with people.

Mr. MAURSTAD. No. Premiums go up right now an average of about 10 percent a year, not 80 percent.

Senator KENNEDY. And as I understand what you are saying is Milliman, in its wisdom, has decided they can look at a property and decide the risk, in an absolute sense, and you cannot increase premiums immediately to achieve a premium commensurate with that risk because Congress has stepped in and said, look, you have got to consider your customers, for God's sake. That is who this is for.

So you are going to have to do it gradually. But will I be able to call Milliman and say, "Milliman, you have now been able to assess the risk, and you can look 20, 30, 40, 50 years in the future and see it. Can you tell me what my risk is and how long I am going to have these premiums? And, by the way, could I get your advice about the stock market?" Are they that good?

Mr. MAURSTAD. So I maybe have not been clear. Milliman did not do what you just articulated.

Senator KENNEDY. That is not what I hear.

Mr. MAURSTAD. Well, then—

Senator KENNEDY. I hear Milliman fathered this child.

Mr. MAURSTAD. No. No. They did not. And we used multiple sources, and it was led by the FEMA chief actuary. And so FEMA drove this process. Milliman supported us in this endeavor.

Senator KENNEDY. Last question. A lot of people buy insurance because they have to. I am glad they do. They should buy it. The mortgage lender says, yep, it is in place, so let's close on the loan, and they drop the insurance.

To follow up on Senator Warren's question, why don't we do a better job of requiring our mortgage lenders to do their job to make sure that people keep their insurance?

Mr. MAURSTAD. Sure. And, of course, the mortgage lenders are responsible for that, and their regulators, and we do want people to have the coverage and keep the coverage. And as I indicated you before, I want to continue to have discussions with you, because I know how important the NFIP is to Louisiana. There have been 260,000 claims paid to Louisiana policyholders to the tune of \$17.7 billion, to help those policyholders on the road to recovery over the course of the last 15 years. So I want this program, and it will work for Louisiana in the future, as it has in the past.

Senator KENNEDY. Thank you, Mr. Chairman.

Chairman BROWN. Thank you, Senator Kennedy. Senator Van Hollen of Maryland is recognized for 5 minutes.

Senator VAN HOLLEN. Thank you, Mr. Chairman, and Mr. Maurstad, thank you for your testimony. Let me start with a question related to the Building Resilient Infrastructure Communities program, which was announced recently by the Biden administration, and directs \$1 billion in additional funds into that account.

I can tell you, many communities in my State of Maryland are excited about the possibilities from this program, but a lot of our

smaller communities who need funding for resiliency projects do not have the resources or the technical expertise that is needed to complete very complex applications. And many of them have applied for prior FEMA grants, different varieties of FEMA grants, been rejected without any explanation as to why their prior applications were rejected.

So I just have two questions for you. What are you doing at FEMA to extend technical assistance to those smaller communities, to help them be able to fill out these applications, number one, and number two, could you also start explaining to communities that have been denied FEMA grant applications why they were denied, so that when they apply in the future they can make any necessary adjustments?

Mr. MAURSTAD. Sure. You know, of course, as you know the Building Resilient Infrastructure Communities is under the Disaster Recovery Relief Act, so it is slightly off of the focus of this hearing, although mitigation is certainly a part of the flood program. And it is within my portfolio, so I will answer the question at a high level, and then we can get back to you with some more specific information.

So one of the things that we did this year, in the first go-around of BRIC, is we selected ten smaller communities to work with them to get a better idea and understanding of what their needs are and the manner in which we could best help small communities. So we are going to learn, and continue to learn, how we can address the issue that we raised, because it is an important one. And we want to—in fact, Administrator Criswell has challenged us to do a better job in providing technical assistance to smaller communities, and we are going to meet that challenge.

As far as the second issue, we have instituted a more robust catalog of projects, what projects are successful, why they were successful, that we hope will help communities that are not successful there yet. We encourage them to work with their State Hazard Mitigation Officer to make sure they put forward good applications, along with our FEMA regions. So we are certainly cognizant of that concern.

It is a national competitive program, and so part of the challenge is how far can you go in making sure that you keep a level playing field. But we are going to work that nuance and do what we can to address the two concerns that you raise. We are well aware of them.

Senator VAN HOLLEN. No, I appreciate that, because smaller communities do not have any lesser risks, but they often have a lot less resources.

Mr. MAURSTAD. I was a mayor of a community of 12,500 people that wrestled with the issues that you are talking about.

Senator VAN HOLLEN. All right. Well, I appreciate that, and again, if you do not get any feedback, zero feedback, it is hard to know if it was something wrong with your application or the money ran out. So really, I think individual feedback, at least, “It was fine but we just didn’t have the money,” or there were technical problems, that would be very helpful.

Mr. MAURSTAD. And we will get back to you with a more robust answer to your questions.

Senator VAN HOLLEN. Thank you. I appreciate that.

So as you have noted and been discussed in this hearing, you know, currently FEMA maps to the 100-year floodplain standard, 1 percent chance of annual flooding. In Maryland, that standard has not been sufficient to cover the risks that are due to changes in rainfall and climate change, especially in Baltimore City, I am told that the current standards do not adequately meet their risks of flooding in an urban area.

Can you talk a little bit about how your Future of Flood risk Data initiative might be helpful to places like Baltimore City?

Mr. MAURSTAD. Sure. And so a couple of points to start with is, of course, the standard, the 1 percent annual chance standard that communities adopt in their local ordinance that they will regulate to that standard, enforce building in the high-risk area to the 1 percent annual chance, is a minimum Federal standard, and we encourage communities to go beyond that minimum standard and have higher standards, and many communities do that.

Future of Flood Risk Data is going to help in situations like that in that it will look to partner with local communities on how we can depict the risk in their community in a graduated fashion. As we have talked earlier, what are the different causes of flooding in the community? What may happen, based on changes in development in the community? You know, if you put in a lot of pavement you are going to get runoff and cause new issues associated with that.

So again, I think that where we are moving is currently within our ability to do it, but our regulatory authority is the 1 percent annual chance. So we want to work with the

Committee on what we can do to better depict flood risk and communicate flood risk in the future through our Flood Risk Initiative.

Senator VAN HOLLEN. Thank you. I appreciate it.

Chairman BROWN. Thank you, Senator Van Hollen. Senator Tester of Montana is recognized for 5 minutes.

Senator TESTER. Thank you, Mr. Chairman. Thank you for being here, Mr. Maurstad. You have been with FEMA for quite a while, right, off and on?

Mr. MAURSTAD. I was with FEMA from 2001 to 2008, and I returned in 2016.

Senator TESTER. OK. Were you in the flood insurance in the first gig, 2001 to 2008?

Mr. MAURSTAD. Yes, 2004 to 2008.

Senator TESTER. So I am going to throw you a curve ball here. I want you to give me some insight on how much money FEMA has put out for disaster for flood. Has it been a pretty static figure over the years, or has it gone up, compared to the early parts of this century, compared to '01-'02, compared to 1920?

Mr. MAURSTAD. From 1985 to 2003, we really did not have any major disasters like we have had since the start of 2004, the four Florida hurricanes in 2004, then Katrina, then, of course, Sandy and Harvey and others. And so certainly the last 20 years there has been a far greater frequency and severity of flood events.

Senator TESTER. And would you say that that has increased FEMA's outlay of cash by 10 percent, 20 percent, 50 percent, 100 percent?

Mr. MAURSTAD. I will get you the specific numbers, but just to give you—

Senator TESTER. A ballpark?

Mr. MAURSTAD. In 2004, four Florida hurricanes was the first year that there was \$2 billion of claims paid in a single year. That was a record. Of course, that got blown out of the water in 2005, when we approximately \$18 billion in claims that year. And so certainly over the course of the last 15, 16 years, far more has been paid out. I think the total paid in claims the entire 50 years of the program is like \$77, \$78 billion.

Senator TESTER. OK. Why do you think that we are putting out more money in the last 20 years than we did in the previous 20?

Mr. MAURSTAD. Again, strictly because of the severity and the increased number of flood events.

Senator TESTER. Yeah. So it is not like people are getting more coverage. It's the fact that we have more events, they are more severe, they tend to last longer, in the case of fires.

Mr. MAURSTAD. Yeah, unfortunately, and that is why we are working so hard to transform the program by developing new policy forms, new products. We believe we are improving our product. We believe we are improving our pricing methodology so that we can change the dynamic associated with the number of homeowners, renters, and small business owners that have flood insurance.

Senator TESTER. Good. So when are talking about, just from your view, from a FEMA point of view—and I know you are not in the climate industry and you are not probably a scientist, although maybe you might be—but from a pure fiscal standpoint, is not doing anything on climate change, you are doing the bare minimum, or just scratching the surface, going to help with the amount of money we put out each and every year, not only by FEMA but a lot of other agencies dealing with disasters?

Mr. MAURSTAD. Certainly, again, as the severity and the frequency of the events increase we have to look at what are the future conditions, what are the changing conditions, what impact the changing climate, what is the impact of increased weather events, what does that have on the resiliency of the Nation, and we need to make investment in that. And clearly we are not making enough of an investment.

Senator TESTER. OK. Yeah, I would agree with you 100 percent, maybe even more.

There are communities on our rivers, and Montana has a few of them, that are facing significant challenges when homeowners have to pay higher flood insurance rates because of flood hazard zones, and the Army Corps of Engineers, which kind of compounds this problem, has refused to carry our certifications of the levees, for a number of reasons. Some of them are valid.

You being an expert in this area, how would you address these challenges so that folks, Montanans, but folks overall—like I said, I think it deals with every one of our drainages—are unfairly penalized?

Mr. MAURSTAD. I am not sure I understand your question.

Senator TESTER. Well, the question is we have got levees that cannot be certified. It puts folks into a situation where their rates go up significantly for flood insurance, and the reason they will not be certified is because the Army Corps is not doing it. They do not have the time anymore.

Mr. MAURSTAD. Right. So I am not an expert in that area, but I would say—again, back to one of the topics that we have today—Risk Rating 2.0 looks at levees in a different way than what they were looked at before. Before, a levee had to be certified or accredited for the area that was protected by that levee to receive the benefit associated with the levee. And so it was, again, a light switch, off or on.

Under the graduated way that we are doing it now, if the levee is just slightly under being certified or accredited, it will get credit for the amount—

Senator TESTER. Protection.

Mr. MAURSTAD. —if it is 90, 95 percent, it will credit for that protection.

Also, on the other end, those levees, and certainly Senator Kennedy has some in his State, that are beyond the minimum Federal standard, they only got a certain amount of credit for that. Going forward, if they have a levee that is twice as good as the minimum Federal standard, they will get credit for that being a better levee in the future.

Senator TESTER. Yeah, but they have to be rebuilt in order to do that. Correct?

Mr. MAURSTAD. I mean, there has already been a significant investment made in New Orleans, for example, in improving their levees.

Senator TESTER. Right. I got you. But that is what I meant. They have to be rebuilt in order to—

Mr. MAURSTAD. It is a resource issue.

Senator TESTER. Right. Exactly right. It might be good to have an infrastructure package, Senator Kennedy.

So with that I will yield to Mr. Chairman.

Chairman BROWN. Thank you, Senator Tester. I hear you are working on one. At least that is what I read.

Senator TESTER. I am hearing there is a lot of action. If there is action, I guarantee you Kennedy is a part of that action.

[Laughter.]

Chairman BROWN. He keeps his name out of the papers, though, doesn't he?

Thank you. Senator Kennedy, the second round, I think Senator Cortez, but nobody else has. I have a couple more questions and then we will wrap up. There are votes called now at 11:45.

And then partly in follow-up to Senator Tester's comments, he noted that NFIP was not structured to pay for catastrophic events and that borrowing to cover such events is a more recent practice in the program. How should Congress approach covering these events in the future?

Mr. MAURSTAD. Well, I would suggest that we have to start with the premise that there would be some kind of an understanding that the five million policyholders themselves cannot pay for the

entire portfolio of what the National Flood Insurance Program does. And so if there is an understanding that that is the case, that there needs to be, or there is going to be taxpayer support, in what form should that taxpayer support come? I would suggest having the program borrow more and more money is not the answer.

And so, yes, part of what we are looking at is to develop a sound financial framework to address the issue of how best for that taxpayer support to come to the program. And we look forward to having additional conversations with you on those solutions.

Chairman BROWN. Thank you. And last question, and a bit of a take-off on Senator Kennedy's comments and Senator Menendez and Senator Tester. Risk Rating 2.0 will lower the cost of premiums for some policyholders, and according to FEMA, as you know, it will also increase the cost of flood insurance for some policyholders, up to 18 percent per year for many years. That is our understanding. A lot of people we know cannot afford that. We know that low-income communities and communities that were the victims of redlining from Jim Crow to redlining, we know what that meant in many communities of color in this country. Too often they are in some of the most hazardous flood areas, not necessarily by choice, and certainly not knowing they were flood areas.

So how do we assist homeowners facing escalating costs, particularly those with low incomes?

Mr. MAURSTAD. Yeah. I mean, there is a legislative proposal that we have been working with the Administration on that we certainly support, that would establish a means-tested assistance program for one- to four-family residences. It will be a sliding scale type of assistance, starting at 125 percent of the average mean income in the area where the policyholder lives, down to 85 percent of the average mean income.

So affordability has been a problem for a number of years, and without a program as being proposed it will continue to be an issue going forward. Where many of those people that are in the areas that you described that do not have—and it is a burden for them to have flood insurance because of the cost of the premium, regardless of what that premium is, more of those individuals need to have access to the program, and that is a way to provide it to them.

Chairman BROWN. Thank you. Mr. Maurstad, thank you for joining us. We will have many more conversations about this. I am hopeful, with Senator Kennedy's interest and Senator Menendez and all people in between, in both parties, that we can come up with some real solutions here.

For Senators who wish to submit questions for the record, those questions are due 1 week from today, Thursday, June 24th. And to Mr. Maurstad, you have 45 days to respond to any questions after you receive them. Thank you, again.

With that, the hearing is adjourned.

[Whereupon, at 11:49 a.m., the hearing was adjourned.]

[Prepared statements and additional material supplied for the record follow:]

PREPARED STATEMENT OF CHAIRMAN SHERROD BROWN

Today's hearing is the second in our effort to enact a long-term reauthorization of the National Flood Insurance Program this Congress.

In May, we heard from a panel of experts who emphasized that we need to do more to improve flood mapping and mitigation in the face of climate change.

Flooding is the most common and most costly natural disaster facing families, businesses, and communities across the country.

We hear from our constituents how it takes families' homes and memories, it wrecks their finances, it shuts small businesses, and it destroys communities' infrastructure. Disasters also often fall hardest on low-income and families of color, and communities that have fewer resources to prepare for and respond to them.

And no matter where you live, everyone pays for the financial fallout from floods, as the country spends tax dollars to help families and communities recover.

As the climate continues to change, we can only expect flooding to get worse, and become even more common.

Spring snow melt, increasingly powerful storms, "sunny day" flooding in coastal communities, and extreme rainfall can overwhelm our Nation's aging infrastructure and the land's capacity to absorb water.

Reversing the trajectory of climate change is going to be a long-term effort. While we work on that, we also need to help our families and communities become more resilient to the flooding we face now and in the coming decades. And whenever possible, we need to prevent that flooding altogether.

The NFIP is critical to that effort. The program provides over \$1.3 trillion in coverage to more than 5 million homes and businesses in more than 22,000 communities.

It's not just an insurance program—NFIP's job isn't just to help communities after the floods, but to prevent and minimize the damage in the first place.

Through NFIP reauthorization, we have an opportunity to improve the NFIP, to make our families, businesses, and communities safer and more resilient, and to meet the challenge posed by a changing climate.

Today, our witness, Mr. David Maurstad, the Deputy Associate Administrator at FEMA, will provide the agency's perspective on what this Committee should consider as we work on that effort. I am interested in the Administration's recommendations for ways we can help strengthen the NFIP so that it:

- Can provide reliable access to insurance for property owners and renters,
- Can address affordability concerns,
- Can ensure that more people are aware of their flood risk and insured against losses, and
- So it can help the Nation predict and reduce our overall level of flood risk, through investments and improvements in mapping, floodplain management, and mitigation.

I also look forward to discussing the NFIP's Risk Rating 2.0 effort, which would change rate setting in the NFIP. We also want to hear more about how FEMA is communicating with stakeholders about these changes, and to better understand how these rates will affect low and moderate income communities, many of whom lack the resources to renovate or move out of harm's way.

I look forward to continuing this work with the Members of the Committee to strengthen the NFIP and take a comprehensive approach to mitigating flood risk through a long-term reauthorization bill.

PREPARED STATEMENT OF SENATOR PATRICK J. TOOMEY

Thank you, Mr. Chairman. Thank you, Administrator Maurstad. Today we hold our second NFIP reauthorization hearing. As I mentioned at our last hearing, finding a consensus on reauthorization will be challenging, and time is tight. Nevertheless, I am ready to work and hope we can reach agreement on a long-term reauthorization that improves the program.

First, let me take a moment to remind everyone of the scope of NFIP's challenges. In the last 16 years, NFIP has had to borrow nearly \$40 billion to pay claims. In other words, NFIP has lost an average of about \$2.25 billion per year over the last 16 years. Those losses are particularly shocking in the context of NFIP's annual premiums collected: \$4.6 billion. Clearly, NFIP systemically underprices flood insurance. Frustratingly, the policies of Congress—not FEMA—are the root causes of NFIP challenges.

During our last hearing, I discussed several of my priorities in reauthorization. First, do no harm. Right now under existing law, NFIP is moving toward actuarially sound premiums. We should not interrupt that progress. Second, we should encourage more private capital in the form of private policies and private reinsurance. Third, if subsidies persist, they must be better targeted. Fourth, we should improve communication with homeowners and homebuyers so that they understand the flood risk of properties. I'd like to take few moments to discuss some of these priorities in more detail.

First, "do no harm." As our understanding of flood risks change, we must allow NFIP to keep up. For instance, I have long heard complaints about mapping. I agree. We need better flood maps, and I support taking steps to improve maps. But better mapping is a means to an end—not an end unto itself.

Mapping is the easy part. The hard part is using those improved maps to better plan development, mitigate risk, and price flood insurance premiums appropriately. Fortunately, FEMA is moving in the right direction with its development of Risk Rating 2.0.

FEMA has worked for years to build a better risk rating model. It incorporates far more granular data in setting premiums, including geography, flooding frequency, flooding types—that is, rivers versus oceans—and building characteristics.

When Risk Rating 2.0 is implemented, we'll have not only a fairer NFIP but also a more fiscally sound NFIP. Reauthorization must not interrupt the implementation of Risk Rating 2.0. Of course, implementation of Risk Rating 2.0 will be a challenge. After all, NFIP has been using more-or-less the same old system for the last half-century.

Administrator Maurstad, I urge you to work hand-in-glove with the Write Your Own insurers who sell and service NFIP policies. I fear that a turbulent roll-out will be used as an excuse to kill this important improvement by defenders of the status quo.

While successful implementation of Risk Rating 2.0 will make NFIP a better program, NFIP still will not be perfect. That is why we must continue to facilitate expansion of the private flood insurance market. My home State of Pennsylvania has been a leader on this front. As of January 2021, there were nearly 13,000 private flood policies in Pennsylvania. That means almost 20 percent of Pennsylvania flood policies are now private.

Private uptake should come as no surprise. NFIP data on Risk Rating 2.0 implementation reveals that millions of policyholders are overpaying for flood insurance. Over 200,000 NFIP policyholders are overpaying by at least \$100 per month. That's \$1,200 per year.

Besides competing on price, private flood may bring better products, such as All Peril Coverage, which would mean no more debating whether a claim resulted from water on wind damage. Further, private flood insurance brings more capacity to the market. That means more uptake by more homeowners, which is undoubtedly a good thing. It also means more resources to process claims after a major flooding like Super Storm Sandy, an event that—as my colleagues know all too well—overwhelmed FEMA.

Finally, I'd like to briefly touch on subsidies within NFIP. As a general principle, I do not think we should be encouraging people to live in flood prone areas by providing flood insurance subsidies. I acknowledge that over the past 50 years, NFIP has acclimated homeowners to a world in which these subsidies exist. And therefore, it would be unfair to suddenly and completely remove them. However, in the interest of fairness and program solvency, property based subsidies must be phased out over time.

Today, properties with subsidized NFIP premiums are overwhelmingly located in our wealthiest communities, and subsidized NFIP premiums are rare in lower-income communities. I am open to finding ways to help current, low-income homeowners afford flood insurance. But such help should not interrupt a long-term trend towards true, risk-based NFIP premiums.

In conclusion, NFIP is broken. It's bad for the taxpayers who must bail it out year after year, and it's bad for homeowners and future homebuyers from whom NFIP obscures true flood risk. I recognize that we cannot fix NFIP overnight, but I hope that we use reauthorization as an opportunity to move it in the right direction.

PREPARED STATEMENT OF DAVID I. MAURSTAD

DEPUTY ASSOCIATE ADMINISTRATOR, FEDERAL INSURANCE AND MITIGATION
ADMINISTRATION, FEDERAL EMERGENCY MANAGEMENT AGENCY

JUNE 17, 2021

Good morning Chairman Brown, Ranking Member Toomey, and Members of the Committee. My name is David Maurstad and I am the Deputy Associate Administrator for Insurance and Mitigation—responsible for directing the Federal Emergency Management Agency’s (FEMA) risk management, mitigation, and flood insurance programs. Thank you for the opportunity to testify today about the National Flood Insurance Program (NFIP, or the Program). Thanks to the NFIP, communities and individuals have bolstered their resilience to flood events. The Nation’s flood loss experience over the past 17 years, however, tells us that we can and need to do better. It is time to rethink the NFIP’s fundamental approach to reducing losses from floods and increasing investment in mitigation. The NFIP is committed to meeting the challenges to our Nation posed by climate change and changing conditions, and we have identified a number of initiatives to improve our ability to address heightened flooding risks, affordability of our product, and equity. Our ability to improve the NFIP begins with the certainty associated with reauthorization, and I urge Congress to approve a multiyear reauthorization of the NFIP with meaningful reforms by September 30, 2021.

NFIP Structure

The NFIP is administered by FEMA’s Federal Insurance and Mitigation Administration (FIMA). Flooding is the most common and costly type of disaster in the United States because where it can rain, it can flood. The NFIP is designed to decrease the impact of future floods, reduce the costs and adverse consequences of flooding, reduce the need for and cost of disaster assistance after floods, and preserve and restore the natural and beneficial values of floodplains. FEMA addresses the challenges of flooding by identifying areas where the flood hazard is greatest; by implementing minimum standards for communities to minimize risk; by making flood insurance available in participating communities; and by providing access to flood mitigation grants.

NFIP Milestones and Challenges

The NFIP is a voluntary program that enables property owners in participating communities to purchase insurance protection against losses resulting from physical damage to or loss of building property and personal property from flooding. To participate in the NFIP, a community must adopt and enforce sound land use ordinances in the floodplain that meet or exceed minimum NFIP floodplain management standards. FEMA has worked closely with local communities to identify and communicate flood hazards through scientific and engineering methods to inform action to reduce the risk of life and property from flooding.

The NFIP holds an impressive 52-year history that includes servicing more than 5 million policyholders currently and \$1.3 trillion in flood insurance coverage in more than 22,500 participating communities in all 50 States, the District of Columbia, and six territories. The NFIP has grown to be the largest single-peril insurance operation in the world. Since 1978, the program has paid over \$72 billion in claims, helping approximately 2 million policyholders recover from disaster. The NFIP enables insured survivors to recover quicker and more fully from a flood event than their uninsured neighbors. The NFIP’s minimum floodplain management standards alone save almost \$2.4 billion in avoided losses annually. Furthermore, the Flood Mitigation Assistance, Repetitive Flood Claims, and Severe Repetitive Loss grant programs have distributed nearly \$1.5 billion in flood grant assistance to communities to mitigate their most vulnerable insured structures.

The Nation’s flood loss experience over the past 17 years, however, highlights the failures of our current flood policy. As a Nation we need to break the cycle of limited investment in resilience, “unprecedented” flooding, and repeated disaster suffering by the same impacted communities and populations. Inaction will result in continued risky development in floodplains, low take-up of flood insurance coverage, mounting NFIP debt to the U.S. Treasury, and ballooning supplemental appropriations.

The frequency and impact of disasters is rising nationwide and disaster suffering continues. Flooding and coastal storms account for roughly 70 percent of all Presidential Disaster Declarations over the past decade.¹ In 2020, the Nation saw 47

¹ FEMA, “Open FEMA Data Sets, Disaster Declaration Summaries”, <https://www.fema.gov/about/openfema/data-sets>.

major disaster declarations across all natural hazards and 22 separate weather and disaster events with losses that exceeded \$1 billion each—the previous high was 16 (2011 and 2017). The historic 2020 hurricane season started earlier than ever, saw the most storms in the shortest amount of time in history, and finished with a record-breaking 30 named storms. Every mile from Texas to Maine was under a storm surge, Tropical Storm or Hurricane Watch or Warning. Hurricane Laura became one of 10 hurricanes on record to make landfall in the U.S. with winds of 150 mph or higher and only the third of this strength to strike Louisiana since records began in 1851.²

The NFIP needs to transform to adapt to the changing climate and to meaningfully increase flood mitigation investment. FEMA is making transformational improvements so that in the aftermath of a flood, whether a Presidentially Declared Disaster or a smaller localized flooding event, there is less disaster suffering.

Disasters have a disparate impact on socially vulnerable or marginalized communities—making their road to recovery longer and more difficult, exacerbating existing issues, exposing resource constraints, and revealing inequities in land use and development patterns. FEMA must also integrate concepts of equity and climate change considerations as it seeks to increase our Nation's resilience.

Recent NFIP Improvements

Over the past few years, FEMA has undertaken a number of internal operational improvements to transform the NFIP to reduce complexity and increase transparency and fairness. Let me share a few of the many steps taken in recent years under current authorities to make the program more efficient and effective:

Risk Rating 2.0

On April 1, 2021, FEMA formally released Risk Rating 2.0: Equity in Action, a new pricing methodology with equitable pricing for each property's unique flood risk. The NFIP's rating methodology has not been updated in more than 40 years. Risk Rating 2.0 delivers a more equitable and risk informed NFIP.

Risk Rating 2.0 builds on years of investment in flood hazard information by incorporating private sector data sets, catastrophe models, and evolving actuarial science. FEMA adopted a multimodel approach to determine flood risk using a suite of models, in much the same way as the National Oceanic and Atmospheric Administration (NOAA) uses models to determine potential hurricane tracks and magnitudes. The improved rating methodology incorporates existing FEMA mapping data and NFIP policy and claims data. Blending catastrophic models sourced from both the Government and commercial entities will ensure the most accurate flood risk rating that the NFIP has ever produced. This allows FEMA to set actuarially sound rates and communicate flood risk more comprehensively than ever before, enabling us to fulfill our obligation to clearly communicate flood risk and allowing policyholders to make more informed decisions about mitigation actions.

By incorporating technological and mapping advances, we can identify individual policyholder risk. We now know that within current rating classes, policyholders with lower-value homes are paying more than they should based on their actual risk profile, and policyholders with higher-value homes are paying less than they should. Risk Rating 2.0 will address this inequity. Under the new methodology, rate increases will not continue indefinitely as it does now. Once a policy reaches its full-risk rate, the increases stop.

Risk Rating 2.0 will change the landscape of flood insurance, enhance risk communication, and enable better floodplain management—ultimately resulting in greater resilience. Risk Rating 2.0 will help put the NFIP on a financially sound path; and will help disaster survivors recover more quickly after floods.

Customer Experience

NFIP Claims

FEMA has redesigned its insurance claim process to be less complicated, more comprehensive, and easier for customers to understand with the goal of providing policyholders clear information in a timely manner.

- In recent years, FEMA streamlined and expedited the process for total loss claims. FEMA offers advance claim payments of up to \$20,000, which can be made before an adjuster inspects the property.
- FEMA has bolstered our field presence following a disaster. From the onset, FEMA representatives from the NFIP are on-site with State insurance officials

² <https://www.tallahassee.com/story/news/2020/08/29/hurricane-laura-shatters-records-more-storms-tap-weather-tiger-forecast/5634246002/>

and in a FEMA disaster field office for more immediate support for daily flood-related activities.

- FEMA designed and implemented a new claims appeals process to improve customer service and transparency to policyholders. This included separating the claims and appeals functions into two distinct branches in order to provide for a nonadversarial review of claim denials, avoid the perception of a conflict of interest, and maintain organizational integrity.
- The NFIP developed and provided guidance to stakeholders on the use of services provided by subject-matter experts, to ensure transparent and consistent claims handling for all policyholders.
- In 2018, FEMA released a user-friendly NFIP Claims Manual. The NFIP Claims Manual improves the clarity of claims guidance given to NFIP WYO companies, flood vendors, flood adjusters, and examiners, so policyholders experience consistent and reliable service. The NFIP Claims Manual has seen two subsequent revisions, in 2019 and 2020, with the next planned release in October 2021.
- Starting in the COVID-19 pandemic, the NFIP encouraged adjusters to remotely adjust claims for the first time in program history, adapting to the environment and giving customers the option to have their claim adjusted without coming into contact with adjusters.

NFIP Forms Redesign

The NFIP must provide a range of insurance products that customers value and agents can easily sell. To comply with the National Flood Insurance Act of 1968, FEMA adopts the Standard Flood Insurance Policy in regulation. The NFIP is continuing its Policy Forms Redesign initiative to modernize its insurance offerings to ensure they are customer-centric and responsive to flood events. Modern consumers expect to have choices and want services tailored to meet their needs, which our current forms do not provide. Further, by requiring the customer to make choices about their coverage, we can better communicate their flood risk and inform the customer about the extent of our policy coverage. We are continuing our research and development efforts and expect to develop a suite of flood insurance products that can serve not only our existing policyholder base but also reach those homeowners and businessowners who may currently be at risk of financial ruin after a flood.

Litigation

FEMA established an oversight team in the Office of Chief Counsel to ensure that Federal law and policy are advanced through claims litigation under the NFIP. The oversight team seeks to ensure that the legal strategies that are employed by insurers under the NFIP follow an approach that is nationally coherent and consistent with the NFIP. The team also seeks to ensure that claims litigation under the NFIP achieves maximum value for the American public. In this respect, the oversight team seeks to support settlement of litigation for amounts that are fair both to policyholders and to insurers. The team also seeks to ensure that the private companies that participate in the NFIP are reimbursed by the U.S. Treasury for the companies' litigation expenses only when those expenses are reasonable considering the goals of the NFIP. Finally, the team is considering means to avoid litigation where less costly means of dispute resolution are available and where those alternative means would be as or more effective in achieving Congressional objectives.

Open FEMA

FEMA is committed to increasing the transparency and accessibility of the agency's data. In 2012, the agency began the OpenFEMA initiative, which provides approved mission-relevant data which stakeholders can use in value-added ways—such as research, analysis, and application development. The NFIP uses this platform to publish over 60 million records, consisting of 40 years of claims history and 10 years of policy history at the point level. Since the release of this information, FEMA has seen this data used by major media outlets, top universities, policy makers, and even individual communities to better understand flood risk and influence flood policy. Likewise, this data is being used across all markets to include realty, lending, education, and reinsurance to not only build flood insurance industry confidence but consumer confidence. With almost 40,000 downloads of this data in just the last week alone, we are inspiring broader program participation and more insightful engagement, including from those outside of the typical flood channels. Even in the midst of the pandemic, emergency managers are using our data to help drive conversations around preparedness, resiliency and disaster response.

Office of the Flood Insurance Advocate

Since the Office of the Flood Insurance Advocate was established in 2014 to advocate for the fair treatment of policyholders and property owners, over 2,800 citizens have reached out for assistance with all aspects of the NFIP, including floodplain

mapping, floodplain management, rate verification, claims handling, and Hazard Mitigation Assistance.

Financial and Individual Resilience

Reinsurance

In 2017, for the first time, FEMA exercised a Congressional provision allowing the program to secure reinsurance from the private markets to help reduce the amount of the NFIP's financial losses. The program recovered \$1.042 billion from this coverage following the losses from hurricane Harvey. FEMA remains committed to further reinsurance purchases to manage the program's risk. Effective Jan. 1, 2021, FEMA secured \$1.153 billion in traditional reinsurance to cover any qualifying flood losses occurring in calendar year 2021. FEMA currently has \$1.2 billion in reinsurance coverage through three 3-year reinsurance agreements with the capital markets, \$500 million of which will expire in August 2021.

Mapping

The National Flood Mapping Program is modernizing flood hazard identification from one focused on probabilistic floods—like the 1-percent-annual-chance-event—to a conversation about structure-specific risk based on a more comprehensive risk profile and that accounts for other types of flood hazards. FEMA identifies flood hazards related to rivers, coasts, lakes, and rainfall using the best available scientific data, the latest technology, and proven engineering methods. As directed by the Biggert–Waters Act of 2012, FEMA is looking to expand the flood hazard mapping inventory (identifying the 100-year and 500-year floodplain in all areas necessary), address climate change/future conditions, analyze areas of residual risk and inundation due to overtopping and/or failure of levees and dams, and modernize its IT infrastructure to make comprehensive flood information more readily available. The Future of Flood Risk Data initiative will provide a more complete risk profile. This initiative is exploring how to provide more comprehensive flood risk data that reflects a range of potential flooding scenarios instead of just the 1-percent-annual chance flood. By moving to a graduated risk analysis, one that depicts multiple sources of flooding—like heavy rainfall, or levee risk beyond the 1 percent annual chance event—we hope to change the misconception that areas outside of the 100-year flood zone have little to no flood risk.

Acquisitions of Flood-Prone Properties

FEMA continues to work with local officials throughout the country to reduce flood risk by acquiring flood-prone properties. From 1989 to 2020, FEMA mitigation grants funded the purchase of more than 49,000 homes, effectively protecting lives and property from future flooding. The cost to acquire the properties was \$3.4 billion and is estimated to have saved more than \$6.49 billion in losses.

Additional FEMA Improvements Impacting Flooding

- The National Mitigation Investment Strategy provides a single strategy for the Nation to more effectively and efficiently advance mitigation investment.
- The Disaster Recovery Reform Act of 2018 (DRRA), enacted in October 2018, reduces the complexity of FEMA and builds the Nation's capacity for the next catastrophic event. DRRA authorized the Building Resilient Infrastructure and Communities (BRIC) program, which shifts mitigation forward to occur before a flood disaster and establishes a reliable stream of funding for a nationwide grant program. Recently, resilience received a big boost for FEMA's Building Resilient Infrastructure and Communities Program's (BRIC) second year. President Biden has announced \$1 billion will be made available for Fiscal Year 2021 funding to State, local, tribal, and territorial governments to assist with undertaking hazard mitigation projects and planning to reduce the risk they face before the next disaster strikes. The BRIC Program provides a critical opportunity for Governments to invest in a more resilient Nation, reduce disaster suffering and avoid future disaster costs. Additional information will be available once the Fiscal Year Notice of Funding Opportunity is released in a few weeks.
- FEMA launched the National Risk Index (Index) in November 2020 to encourage mitigation actions and investment by providing reliable and understandable risk information tools. The Index identifies communities nationwide most at risk to 18 natural hazards and makes it easier for communities to have conversations about how to reduce the impacts of natural disasters. This combination of information on hazards and social vulnerability marks the first time the Federal Government has taken such a sweeping view of community risk and susceptibility to disasters.

- FEMA’s landmark study, “Building Codes Save: A Nationwide Study”,³ shows that modern building codes would avoid at least \$32 billion in losses from natural disasters over a 20-year period when compared to jurisdictions without modern building codes.

NFIP Reauthorization

Affordability

Affordability—Closing the Insurance Gap and Means-Tested Assistance

Flood insurance affordability is complex, touching on the intricate challenges of equity and risk management. FEMA defines affordability as policyholders’ and potential policyholders’ ability to (1) pay for flood insurance, or (2) manage the cost burden posed by flood insurance. FEMA measures this ability to pay or cost burden in terms of the policyholder’s household income compared to Area Median Income, or the median income for the county in which they live.

Under current FEMA authorities, the NFIP cannot offer means-tested discounts or consider policyholders’ ability to pay in its rate-setting process. Instead, the NFIP makes rates “reasonable” by offering discounts and cross-subsidies, primarily based on a building’s age or map changes at a building’s location, or by considering mitigation activities undertaken by the property owner or community. FEMA does not currently consider a policyholder’s ability to pay for coverage when setting discounts on premium rates. This structure does not target households who struggle to maintain coverage or address households who cannot afford a policy in the first place. It leaves vulnerable households underinsured and exposed to extreme hardship from flooding events. Such discounts and cross-subsidies make it harder for the NFIP to communicate risk through the price of flood insurance. They also inhibit the NFIP’s transition to full-risk rates to achieve a sound financial framework for the program.

In the Homeowner Flood Insurance Affordability Act, Congress directed FEMA to develop a framework to help policymakers consider creation of a flood insurance affordability program. FEMA’s April 2018 Affordability Framework for the NFIP provides a data-driven analysis of the cost burden that flood insurance poses for policyholders and nonpolicyholders. The most acute flood insurance affordability challenge lies with low income, homeowners (or renters) in the SFHA who are heavily burdened by the cost of insurance and either forced to purchase the product as a condition of a loan or choose to go bare and suffer the consequences in a flood disaster. FEMA identified that 26 percent of current NFIP residential policyholders and 51 percent of prospective residential policyholders in the highest risk areas meet Department of Housing and Urban Development (HUD) low income definitions, meaning their income is less than 80 percent of Area Median Income. These policyholders and potential policyholders need assistance to purchase flood insurance for their homes to be financially protected.

A forthcoming legislative proposal will address the need to provide affordability assistance to some homeowners as FEMA moves forward with putting the NFIP on more sustainable financial footing. This would be accomplished through a targeted means-tested affordability program to offer premium assistance based on income or ability to pay, rather than location or date of construction.

This legislative proposal would establish a targeted means-tested affordability program for 1–4 family primary residences where the household income is such that Federal flood insurance under the National Flood Insurance Program is unattainable or difficult to maintain. The HUD defines households earning 80 percent or less than area median income as “low income” and households earning 120 percent or less than area median income as “moderate income.” This targeted affordability program would serve to offer low- and moderate-income households a graduated risk premium discount benefit. The discount received would vary by household income. As household income increases, the discount benefit received decreases. FEMA would implement the program such that eligible policyholders see both the full-risk price and the affordability assistance they receive so they understand their true flood risk. In addition, the proposal will use a portion of the appropriation to provide mitigation assistance to eligible policyholder’s properties. This effort will limit eligible policyholders’ exposure to future disasters and potentially reduce premiums.

Sound Financial Framework

The sustainability of the NFIP is often called into question, noting the Program’s \$20.5 billion debt to the U.S. Treasury after catastrophic flood events in the last 17 years and the limited private sector involvement. According to the Government Accountability Office (GAO), the Federal Government must address the long-term

³FEMA, “Building Codes Save: A Nationwide Study of Loss Prevention”. November 2020.

financial exposure of disaster assistance programs and “fully implement measures that promote resilience.”⁴

To the critics of the NFIP’s debt, it is important to understand the historical context. The lack of severe storms between 1986 and 2003 allowed the NFIP to rely on premium payments to pay claims without substantial borrowing. After flood losses began escalating in 2004, Congress authorized the NFIP to borrow billions of dollars from the U.S. Treasury when needed, but that model was intended to be a short-term solution and is not sustainable.

Congress did not design the NFIP to pay for catastrophic flood events without additional financial assistance. Even if the NFIP collects revenue sufficient to meet long-term expected losses, the magnitude, volatility, and geographic concentration of flood risk pose unique challenges. Raising premiums to make up the deficit from extreme events would put an unreasonable burden on current policyholders to pay for past claims. Fundamental challenges to the NFIP’s financial solvency remain, including discounted insurance premiums, interest costs associated with borrowing from the Treasury, and reliance on policyholders to fund wider public benefits.

After the 2017 hurricanes, Congress canceled \$16 billion of the NFIP’s debt, provided as an emergency supplemental. Although an important step in aiding the Nation’s disaster response and recovery, debt cancelation was intended to accompany program reform and further emphasized the critical need for reform. To service the \$20.5 billion debt, FEMA continues to pay the U.S. Treasury over \$400 million in interest expenses annually. This is the third largest NFIP activity by cost. The NFIP is simply not fiscally sustainable in its present form.

Long term and sustainable fiscal soundness will require additional program advances to sustain the NFIP’s capabilities to manage a large flooding event. FEMA’s Risk Rating 2.0—Equity in Action, Reserve Fund, and reinsurance are key factors, and the Administration is currently assessing whether additional authorities may be required.

Conclusion

Congress established the NFIP to address escalating Federal expenditures following frequent and severe flooding events around the country. FEMA remains committed to continuous improvement of the NFIP to better serve our customers and account for both current and future conditions. Reauthorization of the NFIP must encompass innovations that improve the customer experience by reducing complexity and increasing transparency, transforming the communication of risk and improving the accessibility of flood insurance, strengthening local floodplain management minimum standards and addressing repetitive loss properties, and put the NFIP on a sustainable fiscal path.

⁴ GAO, “High-Risk Series: Dedicated Leadership Needed To Address Limited Progress in Most High-Risk Areas”, GAO-21-119SP, March 2, 2021.

**RESPONSES TO WRITTEN QUESTIONS OF
SENATOR MENENDEZ FROM DAVID I. MAURSTAD**

Q.1. Risk Rating 2.0 is one of the largest changes to the National Flood Insurance Program since its inception. According to FEMA, nearly 80 percent of policyholders nationwide will see increases in the first year of implementation. FEMA has also released data showing the size of the increases. However, this information has the statutory rate caps applied, giving no insight into how much a policyholder's actuarial rate will increase.

If not for the statutory rate caps, what percent of all NFIP policies under Risk Rating 2.0 would see premium increases higher than 18 percent of their premium in their first year?

A.1. The NFIP actuaries created a policy-by-policy capping projection to estimate when policies will reach their full rates. This projection uses growth caps specific to categories such as Newly Mapped policyholders, Pre-Flood Insurance Rate Map (Pre-FIRM) homes that are primary residences and Pre-FIRM homes that are secondary residences. Some of these categories are capped at growth rates lower than 18 percent and some at higher rates; the vast majority are capped at 18 percent. This question and the following question are answered using these actuarial projections.

Approximately 71.9 percent of policies would see increases greater than 18 percent in the first year in the absence of rate caps.

The increase for most policyholders (66 percent) will be \$10/month or less. Additionally, 23 percent of policyholders will see decreases. This is because Risk Rating 2.0 is right sizing insurance rates with the actual risk of flooding. There are many policyholders paying far too much in insurance today; they will see decreases. There are also many policyholders already paying what it costs to insure their risk. Typically, the policies that have been underpriced the most are high value homes in high risk areas. Their artificially low premium prices are due to the inequities of the current rating system.

If Risk Rating 2.0 is not implemented, rates will still increase, but they will not increase in a way that is commensurate with the risk or the replacement cost value of the structure. Attached is a spreadsheet that compares rate changes under the current methodology and RR2.0 in year one. Additionally, we created the same comparison for Louisiana, for both levee-only and all of Louisiana. As mentioned in the response to Question 4 [from Sen. Kennedy], under the current rating plan rate increases are currently focused on lower value homes, as can be seen by the comparing the average replacement cost value for increases between \$50 and \$100 per month to the average for all policyholders. These rate increases stop under Risk Rating 2.0. Furthermore, Risk Rating 2.0 greatly reduces the number of policyholders with increases greater than \$100 per month, from 45,012 policyholders under the current rating plan to only 3,199 under Equity in Action.

RR2.0 Comparison Legacy to Year 1
Louisiana - Levee Policies

Monthly Change	Count All Policies	Count Single Family Home	Avg Repl % value	Monthly Change	Count All Policies	Count Single Family Home	Avg Repl % value
< \$100	12,639	7,263	3.1%	< \$100	0	0	0.0%
\$100 to \$50	1,760	1,179	0.9%	\$100 to \$50	0	0	0.0%
\$50 to \$80	2,080	1,422	0.6%	\$50 to \$80	0	0	0.0%
\$80 to \$70	2,377	1,522	0.6%	\$80 to \$70	0	0	0.0%
\$70 to \$60	2,692	1,662	0.7%	\$70 to \$60	0	0	0.0%
\$60 to \$50	3,042	1,961	0.8%	\$60 to \$50	0	0	0.0%
\$50 to \$40	3,839	2,315	1.0%	\$50 to \$40	0	0	0.0%
\$40 to \$30	4,844	2,773	1.2%	\$40 to \$30	0	0	0.0%
\$30 to \$20	5,968	3,346	1.4%	\$30 to \$20	0	0	0.0%
\$20 to \$10	10,673	5,663	2.4%	\$20 to \$10	0	0	0.0%
\$10 to \$0	25,314	18,147	2.6%	\$10 to \$0	0	0	0.0%
Total Green Bar	75,228	47,253	19.9%	Total Green Bar	-	-	0.0%

No Change	-	-	0.0%	No Change*	9,094	4,179	1.8%
Custom rate, no analysis	-	-	0.0%	Custom rate, no analysis	553	302	0.1%
\$0 to \$10	203,167	172,327	72.4%	\$0 to \$10	273,124	222,478	93.5%
\$10 to \$20	18,783	14,549	6.1%	\$10 to \$20	10,763	7,201	3.0%
\$20 to \$30	5,020	3,094	1.3%	\$20 to \$30	5,377	1,348	0.6%
\$30 to \$40	1,998	586	0.2%	\$30 to \$40	2,079	363	0.2%
\$40 to \$50	730	41	0.0%	\$40 to \$50	2,029	267	0.1%
\$50 to \$60	636	11	0.0%	\$50 to \$60	442	258	0.1%
\$60 to \$70	48	3	0.0%	\$60 to \$70	323	223	0.1%
\$70 to \$80	36	1	0.0%	\$70 to \$80	353	236	0.1%
\$80 to \$90	40	-	0.0%	\$80 to \$90	251	202	0.1%
\$90 to \$100	22	-	0.0%	\$90 to \$100	184	144	0.1%
> \$100	47	-	0.0%	> \$100	1,183	664	0.3%
Total Grey Bar	8,577	3,736	1.6%	Total Grey Bar	12,221	3,705	1.6%
Total	305,755	237,865	100.0%	Total	305,755	237,865	100.0%

* no change includes a slight correction to AO/AH and A rates that resulted in anomalistic decrease usually less than \$1 per month

RR2.0 Comparison: Legacy to Year 1
Louisiana - all policies

Monthly Change	Count All Policies	%	Count Single Family Home	Avg Repl % value	Monthly Change	Count All Policies	%	Count Single Family Home	Avg Repl % value
< \$100	18,455	3.7%	11,226	2.8%	< \$100	0	0.0%	0	0.0%
\$100 to \$50	2,797	0.6%	2,077	0.5%	\$100 to \$50	0	0.0%	0	0.0%
\$50 to \$80	3,269	0.7%	2,440	0.6%	\$50 to \$80	0	0.0%	0	0.0%
\$80 to \$70	3,744	0.8%	2,684	0.7%	\$80 to \$70	0	0.0%	0	0.0%
\$70 to \$60	4,271	0.9%	3,040	0.8%	\$70 to \$60	0	0.0%	0	0.0%
\$60 to \$50	4,754	1.0%	3,394	0.8%	\$60 to \$50	0	0.0%	0	0.0%
\$50 to \$40	5,611	1.1%	3,796	0.9%	\$50 to \$40	0	0.0%	0	0.0%
\$40 to \$30	6,985	1.4%	4,422	1.1%	\$40 to \$30	0	0.0%	0	0.0%
\$30 to \$20	8,333	1.7%	5,234	1.3%	\$30 to \$20	0	0.0%	0	0.0%
\$20 to \$10	13,613	2.7%	7,990	2.0%	\$20 to \$10	0	0.0%	0	0.0%
\$10 to \$0	29,339	5.9%	21,354	5.3%	\$10 to \$0	0	0.0%	0	0.0%
Total Green Bar	101,171	20.4%	67,657	16.7%	Total Green Bar	-	0.0%	-	0.0%
No Change	-	0.0%	-	0.0%	No Change*	16,598	3.3%	8,598	2.1%
Custom rate, no analysis	-	0.0%	-	0.0%	Custom rate, no analysis	1,202	0.2%	705	0.2%
\$0 to \$10	343,299	69.2%	300,165	74.3%	\$0 to \$10	441,898	89.1%	375,290	92.9%
\$10 to \$20	34,350	6.9%	27,654	6.8%	\$10 to \$20	17,707	3.6%	12,750	3.2%
\$20 to \$30	9,771	2.0%	6,508	1.6%	\$20 to \$30	7,629	1.5%	2,355	0.6%
\$30 to \$40	4,249	0.9%	1,754	0.4%	\$30 to \$40	3,113	0.6%	702	0.2%
\$40 to \$50	1,313	0.3%	144	0.0%	\$40 to \$50	3,031	0.6%	533	0.1%
\$50 to \$60	1,230	0.2%	50	0.0%	\$50 to \$60	756	0.2%	488	0.1%
\$60 to \$70	139	0.0%	18	0.0%	\$60 to \$70	623	0.1%	421	0.1%
\$70 to \$80	102	0.0%	15	0.0%	\$70 to \$80	579	0.1%	396	0.1%
\$80 to \$90	106	0.0%	5	0.0%	\$80 to \$90	420	0.1%	322	0.1%
\$90 to \$100	60	0.0%	3	0.0%	\$90 to \$100	366	0.1%	284	0.1%
\$100 to \$200	133	0.0%	5	0.0%	\$100 to \$200	2,001	0.4%	1,134	0.3%
Total Grey Bar	17,103	3.4%	8,502	2.1%	Total Grey Bar	18,518	3.7%	6,635	1.6%
Total	495,923	100.0%	403,978	100.0%	Total	495,923	100.0%	403,978	100.0%

* no change includes a slight correction to AO/AH and A rates that resulted in anomalistic decrease usually less than \$1 per month

RR 1.10 Changes Effective 4/1/2021 Currently Underway
Louisiana - all policies

Monthly Change	Count All Policies	%	Count Single Family Home	Avg Repl % value	Monthly Change	Count All Policies	%	Count Single Family Home	Avg Repl % value
< \$100	0	0.0%	0	0.0%	< \$100	0	0.0%	0	0.0%
\$100 to \$50	0	0.0%	0	0.0%	\$100 to \$50	0	0.0%	0	0.0%
\$50 to \$80	0	0.0%	0	0.0%	\$50 to \$80	0	0.0%	0	0.0%
\$80 to \$70	0	0.0%	0	0.0%	\$80 to \$70	0	0.0%	0	0.0%
\$70 to \$60	0	0.0%	0	0.0%	\$70 to \$60	0	0.0%	0	0.0%
\$60 to \$50	0	0.0%	0	0.0%	\$60 to \$50	0	0.0%	0	0.0%
\$50 to \$40	0	0.0%	0	0.0%	\$50 to \$40	0	0.0%	0	0.0%
\$40 to \$30	0	0.0%	0	0.0%	\$40 to \$30	0	0.0%	0	0.0%
\$30 to \$20	0	0.0%	0	0.0%	\$30 to \$20	0	0.0%	0	0.0%
\$20 to \$10	0	0.0%	0	0.0%	\$20 to \$10	0	0.0%	0	0.0%
\$10 to \$0	0	0.0%	0	0.0%	\$10 to \$0	0	0.0%	0	0.0%
Total Green Bar	-	0.0%	-	0.0%	Total Green Bar	-	0.0%	-	0.0%
No Change	16,598	3.3%	8,598	2.1%	No Change*	16,598	3.3%	8,598	2.1%
Custom rate, no analysis	1,202	0.2%	705	0.2%	Custom rate, no analysis	1,202	0.2%	705	0.2%
\$0 to \$10	441,898	89.1%	375,290	92.9%	\$0 to \$10	441,898	89.1%	375,290	92.9%
\$10 to \$20	17,707	3.6%	12,750	3.2%	\$10 to \$20	17,707	3.6%	12,750	3.2%
\$20 to \$30	7,629	1.5%	2,355	0.6%	\$20 to \$30	7,629	1.5%	2,355	0.6%
\$30 to \$40	3,113	0.6%	702	0.2%	\$30 to \$40	3,113	0.6%	702	0.2%
\$40 to \$50	3,031	0.6%	533	0.1%	\$40 to \$50	3,031	0.6%	533	0.1%
\$50 to \$60	756	0.2%	488	0.1%	\$50 to \$60	756	0.2%	488	0.1%
\$60 to \$70	623	0.1%	421	0.1%	\$60 to \$70	623	0.1%	421	0.1%
\$70 to \$80	579	0.1%	396	0.1%	\$70 to \$80	579	0.1%	396	0.1%
\$80 to \$90	420	0.1%	322	0.1%	\$80 to \$90	420	0.1%	322	0.1%
\$90 to \$100	366	0.1%	284	0.1%	\$90 to \$100	366	0.1%	284	0.1%
\$100 to \$200	2,001	0.4%	1,134	0.3%	\$100 to \$200	2,001	0.4%	1,134	0.3%
Total Grey Bar	18,518	3.7%	6,635	1.6%	Total Grey Bar	18,518	3.7%	6,635	1.6%
Total	495,923	100.0%	403,978	100.0%	Total	495,923	100.0%	403,978	100.0%

* no change includes a slight correction to AO/AH and A rates that resulted in anomalistic decrease usually less than \$1 per month

RR2.0 Comparison Legacy to Year 1

Nationwide									
Monthly Change	Count All Policies	% Family Home	Count Single	Avg Repl % value	Monthly Change	Count All Policies	% Family Home	Count Single	Avg Repl % value
<-\$100	196,534	3.9%	129,750	3.9%	<-\$100	0	0.0%	0	0.0%
\$-100 to \$-90	21,368	0.4%	15,547	0.5%	\$-100 to \$-90	0	0.0%	0	0.0%
\$-90 to \$-80	24,081	0.5%	17,738	0.5%	\$-90 to \$-80	0	0.0%	0	0.0%
\$-80 to \$-70	29,278	0.6%	20,187	0.6%	\$-80 to \$-70	0	0.0%	0	0.0%
\$-70 to \$-60	33,474	0.7%	22,725	0.7%	\$-70 to \$-60	0	0.0%	0	0.0%
\$-60 to \$-50	38,688	0.8%	25,525	0.8%	\$-60 to \$-50	0	0.0%	0	0.0%
\$-50 to \$-40	49,009	1.0%	28,436	0.8%	\$-50 to \$-40	0	0.0%	0	0.0%
\$-40 to \$-30	58,188	1.2%	32,020	1.0%	\$-40 to \$-30	0	0.0%	0	0.0%
\$-30 to \$-20	79,298	1.6%	39,893	1.2%	\$-30 to \$-20	0	0.0%	0	0.0%
\$-20 to \$-10	173,034	3.4%	81,689	2.4%	\$-20 to \$-10	0	0.0%	0	0.0%
\$-10 to \$0	463,122	9.2%	213,288	6.3%	\$-10 to \$0*	-	0.0%	-	0.0%
Total Green Bar	1,166,074	23.2%	626,798	18.6%	Total Green Bar	-	0.0%	-	0.0%
No Change	-	0.0%	-	0.0%	No Change	544,432	10.9%	268,967	8.0%
Custom rate, no analysis	-	0.0%	-	0.0%	Custom rate, no analysis	32,991	0.7%	14,165	0.4%
\$0 to \$10	3,329,030	66.3%	2,404,222	71.5%	\$0 to \$10	4,045,113	80.6%	2,833,501	84.3%
\$10 to \$20	330,557	6.6%	232,620	6.9%	\$10 to \$20	180,944	3.6%	133,290	4.0%
\$20 to \$30	108,023	2.2%	73,766	2.2%	\$20 to \$30	85,292	1.7%	50,595	1.5%
\$30 to \$40	46,450	0.9%	17,695	0.5%	\$30 to \$40	27,549	0.5%	9,831	0.3%
\$40 to \$50	14,692	0.3%	3,575	0.1%	\$40 to \$50	21,855	0.4%	5,224	0.2%
\$50 to \$60	11,251	0.2%	1,620	0.0%	\$50 to \$60	9,470	0.2%	4,709	0.1%
\$60 to \$70	3,520	0.1%	792	0.0%	\$60 to \$70	8,240	0.2%	4,375	0.1%
\$70 to \$80	2,009	0.0%	428	0.0%	\$70 to \$80	7,087	0.1%	3,994	0.1%
\$80 to \$90	1,600	0.0%	231	0.0%	\$80 to \$90	5,025	0.1%	3,515	0.1%
\$90 to \$100	1,129	0.0%	220	0.0%	\$90 to \$100	4,516	0.1%	3,203	0.1%
>\$100	3,199	0.1%	497	0.0%	>\$100	45,021	0.9%	27,095	0.8%
Total Grey Bar	191,873	3.8%	98,824	2.9%	Total Grey Bar	214,055	4.3%	112,541	3.3%
Total	5,017,534	100.0%	3,362,464	100.0%	Total	5,017,535	100.0%	3,362,464	100.0%

* no change includes a slight correction to AO/AH and A rates that resulted in anomalous decrease

Q.2. For the policies seeing increases under Risk Rating 2.0, what percent of policies would be at their full actuarial risk rate in year one? What percent of policies would reach their full actuarial rate by year five? In addition, what percent of policies would reach their full actuarial rate by year ten?

A.2. Approximately, 28.1 percent of policyholders are at their full risk rate at year one. After 5 years, that percentage moves to 55.3 percent, and after 10 years to approximately 87 percent.

In the first year, FEMA will collect slightly less than current collections. By the third year, collections are back at current levels. By approximately the 15th year, FEMA will collect roughly 1.5 times the current premium level. Premium collections would have gone up to the same level under the current methodology. So overall premium collection is the same under both methodologies, but Risk Rating 2.0 delivers the premium increases in an equitable manner.

Q.3. Could you please provide a detailed analysis of how premiums of grandfathered properties nationally will be impacted under Risk Rating 2.0? Could you provide the same analysis for grandfathered properties in New Jersey?

A.3. See attached Excel spreadsheet which details the year one changes for grandfathered policies nationwide, in New York, and in New Jersey.

Note that nationwide, grandfathered policies have a similar distribution of changes to the nationwide total. The percent of decreases in year one is actually greater than the percent for all nationwide policies (28.5 percent of grandfathered policies decreasing vs. 23.3 percent of all policies; 22.0 percent of grandfathered single family home policies vs. 18.6 percent of all single family home policies). At the same time, slightly more grandfathered policies will see increases greater than \$20 (4.9 percent of grandfathered policies increasing more than \$20 vs. 3.9 percent of all policies; 9.5 percent of grandfathered single family home policies vs. 2.9 percent of all single family home policies). But it should be noted that fewer than 5 percent of single-family home policies are grandfathered, meaning that the single family home grandfathered policies increasing more than \$20 represent approximately 0.3 percent of all policyholders.

RR2.0 Comparison Legacy to Year 1
Nationwide - All Policies

Monthly Change	Count All Policies	Count Single % Family Home	%
< \$100	196,534	129,750	3.9%
\$-100 to \$-90	21,368	15,547	0.5%
\$-90 to \$-80	24,081	17,738	0.5%
\$-80 to \$-70	29,278	20,187	0.6%
\$-70 to \$-60	33,474	22,725	0.7%
\$-60 to \$-50	38,688	25,525	0.8%
\$-50 to \$-40	49,012	28,438	0.8%
\$-40 to \$-30	58,186	32,018	1.0%
\$-30 to \$-20	79,299	39,893	1.2%
\$-20 to \$-10	173,464	81,689	2.4%
\$-10 to \$0	463,728	213,288	6.3%
Total Green Bar	1,167,112	626,798	18.6%
\$0 to \$10	3,326,448	2,404,222	71.5%
\$10 to \$20	330,634	232,620	6.9%
\$20 to \$30	108,045	73,766	2.2%
\$30 to \$40	47,895	17,695	0.5%
\$40 to \$50	14,692	3,575	0.1%
\$50 to \$60	11,251	1,620	0.0%
\$60 to \$70	3,520	792	0.0%
\$70 to \$80	2,009	428	0.0%
\$80 to \$90	1,600	231	0.0%
\$90 to \$100	1,129	220	0.0%
> \$100	3,199	497	0.0%
Total Grey Bar	193,340	98,824	2.9%
Total	5,017,534	3,362,464	100.0%

RR2.0 Comparison Legacy to Year 1
Nationwide - Grandfathered Policies

Monthly Change	Count All Policies	Count Single % Family Home	%
< \$100	9,403	5,720	3.5%
\$-100 to \$-90	1,578	1,172	0.7%
\$-90 to \$-80	1,950	1,529	0.9%
\$-80 to \$-70	2,771	1,827	1.1%
\$-70 to \$-60	3,380	2,250	1.4%
\$-60 to \$-50	4,042	2,711	1.7%
\$-50 to \$-40	5,129	3,097	1.9%
\$-40 to \$-30	7,840	3,489	2.2%
\$-30 to \$-20	10,216	3,859	2.4%
\$-20 to \$-10	23,314	4,310	2.7%
\$-10 to \$0	77,681	5,704	3.5%
Total Green Bar	147,304	35,668	22.0%
\$0 to \$10	304,384	83,177	51.3%
\$10 to \$20	40,729	27,959	17.2%
\$20 to \$30	14,670	10,305	6.4%
\$30 to \$40	6,073	4,047	2.5%
\$40 to \$50	2,206	655	0.4%
\$50 to \$60	777	161	0.1%
\$60 to \$70	468	82	0.1%
\$70 to \$80	308	43	0.0%
\$80 to \$90	222	18	0.0%
\$90 to \$100	207	17	0.0%
> \$100	395	20	0.0%
Total Grey Bar	25,326	15,348	9.5%
Total	517,743	162,152	100.0%

RR2.0 Comparison Legacy to Year 1									
New Jersey - All Policies					New Jersey - Grandfathered Policies				
Monthly Change	Count All Policies	%	Count Single Family Home	%	Monthly Change	Count All Policies	%	Count Single Family Home	%
<-\$100	13,188	6.1%	10,193	8.8%	<-\$100	225	1.2%	150	2.1%
\$-100 to \$-90	1,145	0.5%	859	0.7%	\$-100 to \$-90	41	0.2%	35	0.5%
\$-90 to \$-80	1,132	0.5%	885	0.8%	\$-90 to \$-80	60	0.3%	48	0.7%
\$-80 to \$-70	1,349	0.6%	974	0.8%	\$-80 to \$-70	78	0.4%	52	0.7%
\$-70 to \$-60	1,382	0.6%	1,027	0.9%	\$-70 to \$-60	82	0.4%	71	1.0%
\$-60 to \$-50	1,728	0.8%	1,105	1.0%	\$-60 to \$-50	81	0.4%	61	0.8%
\$-50 to \$-40	2,189	1.0%	1,206	1.0%	\$-50 to \$-40	111	0.6%	91	1.2%
\$-40 to \$-30	2,828	1.3%	1,228	1.1%	\$-40 to \$-30	160	0.9%	88	1.2%
\$-30 to \$-20	3,422	1.6%	1,368	1.2%	\$-30 to \$-20	275	1.5%	93	1.3%
\$-20 to \$-10	5,113	2.4%	1,941	1.7%	\$-20 to \$-10	283	1.5%	110	1.5%
\$-10 to \$0	12,842	5.9%	3,435	3.0%	\$-10 to \$0	1,412	7.7%	131	1.8%
Total Green Bar	46,318	21.3%	24,221	21.0%	Total Green Bar	2,808	15.2%	930	12.7%
\$0 to \$10	137,169	63.2%	71,904	62.2%	\$0 to \$10	12,352	67.0%	4,263	58.3%
\$10 to \$20	22,422	10.3%	14,984	13.0%	\$10 to \$20	2,198	11.9%	1,538	21.0%
\$20 to \$30	6,621	3.0%	3,442	3.0%	\$20 to \$30	587	3.2%	396	5.4%
\$30 to \$40	2,270	1.0%	712	0.6%	\$30 to \$40	219	1.2%	136	1.9%
\$40 to \$50	909	0.4%	219	0.2%	\$40 to \$50	128	0.7%	53	0.7%
\$50 to \$60	535	0.2%	60	0.1%	\$50 to \$60	52	0.3%	1	0.0%
\$60 to \$70	257	0.1%	25	0.0%	\$60 to \$70	22	0.1%	-	0.0%
\$70 to \$80	155	0.1%	6	0.0%	\$70 to \$80	16	0.1%	-	0.0%
\$80 to \$90	119	0.1%	-	0.0%	\$80 to \$90	13	0.1%	-	0.0%
\$90 to \$100	85	0.0%	1	0.0%	\$90 to \$100	12	0.1%	-	0.0%
>\$100	318	0.1%	1	0.0%	>\$100	26	0.1%	-	0.0%
Total Grey Bar	11,269	5.2%	4,466	3.9%	Total Grey Bar	1,075	5.8%	586	8.0%
Total	217,178	100.0%	115,575	100.0%	Total	18,433	100.0%	7,317	100.0%

RR2.0 Comparison Legacy to Year 1
New York - All Policies

Monthly Change	Count All Policies	Count Single Family Home	%	
< -\$100	16,653	11,293	9.7%	9.8%
\$-100 to \$-90	1,293	891	0.8%	0.8%
\$-90 to \$-80	1,279	994	0.7%	0.9%
\$-80 to \$-70	1,472	997	0.9%	0.9%
\$-70 to \$-60	1,640	1,118	1.0%	1.0%
\$-60 to \$-50	1,598	1,147	1.0%	1.0%
\$-50 to \$-40	2,225	1,336	1.3%	1.2%
\$-40 to \$-30	2,140	1,430	1.3%	1.2%
\$-30 to \$-20	2,860	1,534	1.7%	1.3%
\$-20 to \$-10	7,508	4,093	4.4%	3.6%
\$-10 to \$0	15,340	7,422	9.0%	6.4%
Total Green Bar	54,008	32,255	31.6%	28.0%
\$0 to \$10	93,772	68,599	54.8%	59.5%
\$10 to \$20	12,041	8,524	7.0%	7.4%
\$20 to \$30	6,235	3,863	3.6%	3.4%
\$30 to \$40	2,535	1,329	1.5%	1.2%
\$40 to \$50	1,159	478	0.7%	0.4%
\$50 to \$60	537	111	0.3%	0.1%
\$60 to \$70	256	45	0.1%	0.0%
\$70 to \$80	131	17	0.1%	0.0%
\$80 to \$90	109	4	0.1%	0.0%
\$90 to \$100	69	2	0.0%	0.0%
> \$100	247	2	0.1%	0.0%
Total Grey Bar	11,278	5,851	6.6%	5.1%
Total	171,099	115,229	100.0%	100.0%

RR2.0 Comparison Legacy to Year 1
New York - Grandfathered Policies

Monthly Change	Count All Policies	Count Single Family Home	%	
< -\$100	615	476	5.1%	7.5%
\$-100 to \$-90	93	80	0.8%	1.3%
\$-90 to \$-80	84	73	0.7%	1.1%
\$-80 to \$-70	135	87	1.1%	1.4%
\$-70 to \$-60	171	125	1.4%	2.0%
\$-60 to \$-50	170	130	1.4%	2.0%
\$-50 to \$-40	183	148	1.5%	2.3%
\$-40 to \$-30	257	159	2.2%	2.5%
\$-30 to \$-20	252	167	2.1%	2.6%
\$-20 to \$-10	436	191	3.7%	3.0%
\$-10 to \$0	935	208	7.8%	3.3%
Total Green Bar	3,331	1,844	27.9%	28.9%
\$0 to \$10	4,668	1,808	39.1%	28.3%
\$10 to \$20	1,675	1,216	14.0%	19.1%
\$20 to \$30	1,260	885	10.5%	13.9%
\$30 to \$40	632	480	5.3%	7.5%
\$40 to \$50	244	136	2.0%	2.1%
\$50 to \$60	58	10	0.5%	0.2%
\$60 to \$70	27	-	0.2%	0.0%
\$70 to \$80	18	2	0.2%	0.0%
\$80 to \$90	7	-	0.1%	0.0%
\$90 to \$100	6	-	0.1%	0.0%
> \$100	18	-	0.2%	0.0%
Total Grey Bar	2,270	1,513	19.0%	23.7%
Total	11,944	6,381	100.0%	100.0%

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR WARNOCK
FROM DAVID I. MAURSTAD**

Q.1. Over the years, FEMA has allowed midterm cancellations of NFIP policies with pro rata refunds when non-NFIP replacement coverage was confirmed. However, NFIP policyholders today who are struggling with affordability challenges have no such optionality or recourse. Beginning in 2012, NFIP established Cancellation Reason Code 16 that allowed policyholders to cancel mid-term and receive prorated refunds if they found alternative non-NFIP coverage. Three years later, in 2015, NFIP rescinded this option for policyholders. In 2017, in response to a written question regarding this change to NFIP's cancellation policies, then Deputy Associate Administrator for Insurance and Mitigation, Roy Wright, testified that FEMA's regulations restrict its ability to issue refunds for canceled policies. He went on to say that "FEMA is seeking regulatory changes to allow FEMA to cancel the NFIP policy with premium refund when the insured has obtained a replacement flood insurance policy through the private company."

As forecast by Mr. Wright, in the spring of 2018 FEMA announced that it would, in effect, reimplement the terms of Code 16 as Cancellation Reason Code 26. However, when Code 26 was published in 2018, it bore little resemblance to Code 16 even though under Code 16 no detrimental outcomes were ever reported. In March of 2019, Code 26 was minimally revised but continues to be a major impediment to consumer choice in flood insurance.

Can you provide an update on FEMA's current review of this issue?

A.1. The current 44 CFR §61.5(c) limits mid-term premium refunds. It provides that only a policy holder canceling because their ownership in the property has ended will be entitled to pro-rata premium refunds. In other words, a policy holder who purchases a private non-NFIP policy mid-term and then cancels their NFIP policy cannot receive a refund. In outlining this prohibition, 44 CFR §61.5(c) specifically mentions the seasonal nature of flooding. Although premium is paid on a yearly basis, the highest risk of flooding is limited to certain months (i.e., the "seasonal nature"). Accordingly, there is an actuarial concern with mid-term cancellations.

Effective October 1, 2021, guidance on nullifications, cancellations and refunds will be consolidated at 44 CFR §62.5. This consolidation provides for refunds in certain scenarios but will not allow for a refund when a non-NFIP private policy is purchased.

FEMA supports legislative action to allow refunds for policy holders who cancel mid-term after purchasing a private non-NFIP policy. Additionally, FEMA will continue to explore the possibility of rulemaking to allow for such refunds through regulation.

Q.2. How does FEMA's current position square with the federal requirement that lenders accept compliant non-NFIP flood insurance whenever tendered?

A.2. FEMA supports purchase of any flood insurance, but its current regulations do not provide the authority to allow for refunds when a policy holder purchases a non-NFIP flood policy.

Q.3. At a time when affordability of flood insurance is a top concern, what precisely led FEMA to twice reverse this policy?

A.3. FEMA supports purchase of any flood insurance, but its current regulations do not provide the authority to allow for refunds when a policy holder purchases a non-NFIP flood policy.

Q.4. Will FEMA give priority to revisiting this change to allow policyholders that find a more affordable flood insurance policy to receive the savings immediately as previously allowed under Code 16?

A.4. FEMA supports legislative action to allow cancellations of NFIP policies midterm due to purchase of a private policy and would like the opportunity to provide technical drafting assistance for any legislative action that supports mid-term cancellations due to private policy purchase.

**RESPONSES TO WRITTEN QUESTIONS OF SENATOR KENNEDY
FROM DAVID I. MAURSTAD**

Q.1. Public involvement and policy holder interests do not seem to be a consideration in the formulation of Risk Rating 2.0. Risk Rating 2.0 proponents speak about fairer rates, but there has been no meaningful public involvement during the 5 years it has taken FEMA to establish this proposal. Prior to this once-in-a-generation overhaul of the National Flood Insurance Program (NFIP), how has the general public been notified or consulted about these major changes?

As FEMA began developing Risk Rating 2.0 did FEMA ever consider doing a rulemaking process with public notice and comment before this once-in-a-generation NFIP overhaul takes effect beginning in October of this year?

The Administrative Procedure Act ensures that the public is guaranteed a voice and proper insight into proposed Government agencies' rules/regulations. Pursuant to the Administrative Procedure Act, why haven't the underlying assumptions, models, and data used to formulate Risk Rating 2.0 been released for public comment and input?

Why must policy holders wait until August to learn more about their rates?

Will FEMA make rate available to the public at this time?

A.1. Since 1968, the National Flood Insurance Act has required the Federal Emergency Management Agency (FEMA) to periodically review, and if necessary, revise the way we set nondiscounted premium rates. The requirement to estimate and charge actuarial rates, also referred to as, nondiscounted premium rates is outlined at 42 U.S.C §4014(a)(1); 4015(c).

The Administrator is authorized to undertake and carry out such studies . . . as may be necessary to estimate, and from time to time estimate on an area subdivision or other appropriate basis (1) the risk premium rates for flood insurance which—(A) based on consideration of—(the risk involved and accepted actuarial principles . . . [that] would be required in order to make such insurance available on an actuarial basis . . . [42 U.S.C. §4014(A)(1)].

The Act identifies properties for which FEMA shall charge actuarial rates as Post-FIRM properties: properties built after FEMA

has mapped the base flood for an area. 42 U.S.C. §4015(c). While the Act does outline certain rulemaking requirements, notably 42 U.S.C. §4014(f)(3), it makes no such requirement for estimation of actuarial rates. As such, there is no statutory mandate for rulemaking.

Even if the rulemaking requirements outlined in the Administrative Procedures Act (APA) at 5 U.S.C. §553 were directly applicable, the APA offers exceptions to rulemaking for matters relating to “benefits and contracts” 5 U.S.C. §553(a)(2), and for rules of “procedure and practice” 5 U.S.C. §553(b)(3)(A)—thus offering a considerable amount of discretion as to when rulemaking is undertaken.

After two earlier delays in implementation, the new Administration decided to take a phased approach to the implementation of Risk Rating 2.0: Equity in Action (Risk Rating 2.0) to ensure existing policyholders have ample time to make informed decisions. The approach was announced in April 2021 and allows existing policyholders, beginning in October, to choose to transition to Risk Rating 2.0 if it is financially advantageous. All policyholders, beginning in April 2022, will be transitioned, giving existing policyholders at least one year to understand the transition to Risk Rating 2.0. Additionally, in the current rating paradigm, all policyholders have been and would continue to experience rate increases, whereas with Risk Rating 2.0, 23 percent of existing policyholders would see rate decrease upon the transition to the new rating methodology and all other policyholders would see the gradual statutory increases mandated by Congress.

- In Phase I: New policies beginning Oct. 1, 2021, will be subject to the new rating methodology. Also beginning Oct. 1, 2021, existing policyholders eligible for renewal will be able to take advantage of immediate decreases in their premiums at the next policy renewal.
- In Phase II: All remaining policies renewing on or after April 1, 2022, will be subject to the new pricing methodology, with renewing policyholders either immediately decreasing or increasing from their current premium to their full risk premium over time.

This phased approach allows more time for both industry and policyholders to prepare. The agency has spent significant time over the last 3 years on outreach and engagement with a variety of industry and nonindustry stakeholders, including professional and trade associations, State insurance regulators, State insurance commissioners, various Government agencies, and the media. To date, FEMA has conducted more than 500 outreach and engagement activities around Risk Rating 2.0.

Major National Flood Insurance Program changes are announced to the public twice a year, in April and October. Annual rate changes are announced every October, effective the following April. These changes are announced via bulletin to our industry partners and posted to floodsmart.gov. In concert with the NFIP’s general practice of announcing major program changes semi-annually, on April 1, 2021, FEMA issued W-21003 bulletin. The bulletin provided notification of the change to the new pricing methodology,

the overall timeline for implementation, and FEMA's expectations of NFIP insurers (i.e., WYO companies and NFIP Direct).

Additionally, FEMA has released several sets of data and information, listed below, for the public to understand the changes that will be made once Risk Rating 2.0 is fully implemented. FEMA released:

- “Risk Rating 2.0 Methodology and Data Sources”, released in April of this year provides a consolidated description of the methodology and data sources used to develop Risk Rating 2.0 and information describing how the work complies with relevant actuarial standards . . . The report also provides the Risk Rating 2.0 algorithm, rates, and rating factors, as well as examples that illustrate how premiums are calculated under the new rating plan.
- “Risk Rating 2.0 State Profiles”. These State profiles provide a detailed report of the Risk Rating 2.0 transformation on the insurance policies within that State, as well as county level and zip-code level premium change analysis.
- “Risk Rating 2.0 Methodology and Data Sources”, this document provides a complete overview of the technical methodology and data used to build Risk Rating 2.0.
- “Premium Calculation Worksheets”. A workbook that shows how the rating calculation produces a premium.
- “Appendix D Rating Factor Tables”. A workbook that encompasses all the rating factors for the variables.

FEMA will continue to release additional information regarding Risk Rating 2.0. At this time, NFIP policyholders can contact their insurance company or insurance agent to learn more about what Risk Rating 2.0-Equity in Action means to them. FEMA has also provided the Write Your Own companies and NFIP Direct the guidance necessary to implement Risk Rating with their agent workforce. Final guidance was released on September 1, 2021, though industry partners have seen this material in draft form since April. As our efforts move forward, FEMA will continue to partner with the Write Your Own companies and NFIP Direct to ensure their staff, agents, business processes, and technology are implementing the Risk Rating 2.0 changes for both new business and current policyholders.

Q.2. According to FEMA's website, FEMA is developing flood hazard models using private sector data sets, catastrophe models, and evolving actuarial science. For the public, it is not enough to just describe and cite a model. How does FEMA plan to communicate to policy holders that their premiums are derived from their flood risks in plain English?

Are policy holders aware of their flood risk's influence over the cost of premiums? And are they aware of the correlation between the two?

A.2. FEMA will deliver flood insurance rates under Risk Rating 2.0 that are easier to understand and better reflect a property's unique flood risk. Risk Rating 2.0 uses a series of rating variables to describe the flooding risk at the structure level, such as the structure's distance from a flooding source, elevation, and the cost to re-

build a property. Therefore, the connection between a policyholder's flood risk and insurance premium should be clearer than in the past.

For the last 3+ years, FEMA has spent significant time on outreach and engagement with a variety of industry and nonindustry partners as well as the media. This has ensured these groups can effectively assist the public in understanding both Risk Rating 2.0 and the factors that drive the price of flood insurance. In addition, insurance agents are essential partners in communicating the value of flood insurance to the public. FEMA has worked to ensure the agent community is well-versed in Risk Rating 2.0 and are ready to communicate to their customers in plain language how flood insurance works. FEMA continues to work with multiple stakeholders on refining implementation and fully operationalizing RR 2.0. As part of this process, we're reviewing various ways to utilize the new information and insights available to us to best communicate flood risk to individuals, communities, other Government agencies, and external third parties.

As of September 3, 2021, FEMA has trained over 15,258 agents on the fundamentals of Risk Rating 2.0., so they can begin to work with current and prospective policyholders. Beginning August 2021, current National Flood Insurance Program policyholders have had the ability to contact their insurance company or insurance agent to learn more about what Risk Rating 2.0-Equity in Action means to them.

Q.3. Insurance companies have been required by FEMA to sign Non-Disclosure Agreements (NDA) before seeing the details on Risk Rating 2.0.

Please provide a detailed explanation regarding why FEMA decided to require insurance companies to sign an NDA. Additionally, please provide my office with a copy of the NDA.

A.3. Write Your Own (WYO) industry partners are critical in delivery of the NFIP, and FEMA worked closely with them throughout the development of Risk Rating 2.0.

Given that the development of Risk Rating 2.0 was a fluid process and FEMA wanted to include industry expertise from the WYOs, it was necessary to put a Non-Disclosure Agreement (NDA) in place prior to the official release of any implementing guidance. FEMA wanted to ensure that when the design of Risk Rating 2.0 was complete, FEMA and industry partners could implement it in a consistent fashion. The NDA was designed to keep deliberative information confidential as well as ensure that information regarding the methodology and the implementation timeline was consistent and disseminated only once decisions were finalized. FEMA lifted the NDA requirement in April of this year. At that time, FEMA had provided public notification of the change to the new pricing methodology, the overall timeline for implementation, and FEMA's expectations of NFIP insurers. A copy of the NDA is attached.

Q.4. I am deeply concerned with the affordability of flood insurance under the Risk Rating 2.0 proposal. This proposal will significantly raise premiums for policy holders in Louisiana. In some cases, homeowners will see over a 70 percent increase.

As you were creating RR 2.0, was flood insurance affordability a consideration in the pricing structure? As was intended with the creation of the NFIP, is FEMA planning to continue to balance the need for affordable rates with capturing risk?

A.4. FEMA recognizes and shares concerns about flood insurance affordability. Pursuant to 42 U.S.C. §4014(a)(1); 4015(c), FEMA is required to estimate and charge actuarial rates, also known as non-discounted premium rates. Accordingly, rates must be risk based. FEMA will continue to ensure that the transition to new rates under Risk Rating 2.0 is reasonable, equitable, and complies with the gradual 18 percent statutory rate increase limits put in place by Congress. In April 2018, FEMA delivered an Affordability Framework to Congress to assist policymakers in considering how to provide targeted assistance to policyholders and potential policyholders.

The President's Budget in Fiscal Years 2019, 2020, and 2021 included a proposal that was intended to be a first step in developing a comprehensive affordability program. In 2021, FEMA developed its NFIP Means-Tested Assistance Program proposal that would offer a graduated discount benefit to current and potential policyholders whose households make at or below 120 percent of area median income. This proposal was included in the President's FY22 Budget. FEMA urges Congress to ensure that more individuals are covered by flood insurance by making insurance more affordable to low-and-moderate income policyholders residing in 1-4 family dwellings used as primary residences.

Rates will increase at the same overall levels under either the current rating plan or Risk Rating 2.0, but under the current rating plan they will increase inequitably. Under Risk Rating 2.0 they will increase fairly.

Under the current rating plan, lower value homes pay more than they should for flood insurance, subsidizing higher value homes. And these same low value homes are currently bearing larger increases in premium than higher value homes. Without implementing Risk Rating 2.0 the inequity of the current rating plan will continue to grow, making flood insurance for lower value homes less affordable.

As shown in the attached summary, both at a national level and in Louisiana, under the current rating plan thousands of policyholders are currently seeing increases between \$50 and \$100 per month. And the average replacement cost value for these homes is around \$250,000, well below the average replacement value of approximately \$400,000 in Louisiana and \$450,000 nationally. Under Risk Rating 2.0, fewer structures will see increases above \$50, the few that do have replacement cost values well in excess of the national and State average.

Furthermore, without Risk Rating 2.0, thousands of policyholders who are currently overpaying for flood insurance will not see reduced premiums. The attachment also shows that the average replacement cost value for those with the largest decreases is likewise below the nationwide and State average. Under the current rating plan rates will continue to increase, with large, inequitable increases that are particularly focused on older, lower value homes. Risk Rating 2.0 was designed to address these inequities, not only

halting these increases for many of the lower value homes, but actually decreasing their premiums.

Under the current methodology, premiums for all policyholders would continue to increase by an average of 10 percent per year indefinitely, with no upper bound that limits costs on the highest end of the spectrum. Without a transition to Risk Rating 2.0, inequitable rates will remain in place, and many policyholders will continue to pay more than they should.

FEMA champions the Biden administration's budget proposal for Fiscal Year (FY) 2022 aimed at helping address flood insurance affordability for low-to-moderate income households. FEMA developed its NFIP Means-Tested Assistance Program proposal, based on years of research, to provide flood insurance premium discounts to current and prospective policyholders whose household incomes are less than 120 percent of area median income. The program was designed to pay a percentage of a low- to moderate-income policyholder's flood insurance premium, with the discount percentage falling as household income rises.

Q.5. To help keep insurance rates affordable, isn't it essential that we examine not just program revenues but also program costs? Do you believe, in order to maintain affordability, both the program's expenses and revenue should be taken into consideration?

A.5. FEMA is undertaking three efforts to manage the expenses of the program:

1. Expense Analysis Working Group—This working group will perform annual analysis of WYO companies' income and expenses to derive implied profit or loss.
2. Future of Insurance Study—DHS S&T awarded a contract in the last quarter of FY2021 to study the effects of technological advancements on the future of insurance, including: (a) Product offerings; (b) Pricing paradigms; (c) Delivery mechanisms; (d) New technologies; and (e) Future of agent and adjuster commission. The study will commence in the first quarter of FY2022 and is expected to take 1 year to complete.
3. WYO Compensation Study—FEMA has established a working group and placed a contract with RAND to examine WYO compensation. The study will lead to new rulemaking regarding WYO Compensation. FEMA awarded the contract in the last quarter of FY2021 and the study commenced at the end of FY2021. The study is projected to take 1 year to complete.

Q.6. Why is it that the only solution to address the solvency of the program is to raise rates on existing policy holders without trimming the costs run up by agencies and their contractors?

Why will policy holders experience a rise in the cost of their premiums, but contractors and the agencies will see minimal to no change?

A.6. FEMA is continuously undertaking efforts to manage expenses of the program. For example, the recently completed modernization of our IT system saves the NFIP over \$22 million per year in operations and maintenance expenses. Risk Rating 2.0 is essential to reducing costs as it is expected to create efficiencies through simplification of delivery.

Q.7. Over the past decade, the NFIP's debt has shot up exponentially. To reduce or eliminate the NFIP debt, do you feel that we also need to reform payments to write-your-own insurers, NFIP operating expenses, and interest on NFIP debt payments to the U.S. Treasury?

A.7. As discussed above, FEMA is undertaking efforts to manage programmatic expenses to WYO insurers, and this includes examination of the most appropriate way to compensate WYO companies. Though important, WYO compensation and administrative costs are not what is driving the NFIP's debt, it is the payment of claims on large, catastrophic events. Addressing the debt requires a comprehensive approach, which addresses structural flaws in the way the NFIP is designed. We look forward to working with Congress on a sound financial framework that addresses interest payments to the U.S. Treasury that cost current NFIP policyholders \$287 million annually.

The NFIP's structural flaws have been apparent since the historic 2005 hurricane season. Since that time, a series of catastrophic floods have highlighted the failures of current flood policy, including the fact that the NFIP is not fiscally sustainable in its present form. The NFIP manages most of its financial risk through authority to borrow from the U.S. Treasury, the repayment of which is beyond the NFIP's current capabilities. Congress did not design the program to handle catastrophic losses from events such as Hurricane Katrina (2005), Hurricane Sandy (2012), and Hurricane Harvey (2017). When disasters have exceeded the NFIP's capacity to pay, Congress has repeatedly raised the NFIP's borrowing authority (from its 2005 level of \$1.5 billion to the current level of \$30.425 billion) rather than address this structural flaw of the program.

Historically, the NFIP's borrowing authority limit has only been raised when significant disaster events occur causing large levels of loss. Reliance on increasing borrowing authority to pay for valid claims is not sustainable. Large debt accrues large accrued interest payments, hampering the NFIP's balance sheet. Since 2005, the NFIP has paid \$5.26 billion in interest payments alone. In the current NFIP financial situation, even with Risk Rating 2.0 premiums, there is only a 4 percent chance of ending a 10-year window with a positive net balance.

Establishing a sound and transparent financial framework for the NFIP would require statutory changes that would require the Administrator to strive to manage the NFIP to the 1-in-20 occurrence exceedance loss level (approximately \$10.5B) utilizing the following: the National Flood Insurance Fund, Reserve Fund, annual Congressional Equalization Payments, reinsurance, and any other funds made available to the Administrator through appropriations or otherwise for carrying out the flood insurance program. If the Administrator finds that a flooding event will exceed the flood insurance program's 1-in-20 occurrence exceedance loss level, emergency supplemental appropriation should be instituted. If the NFIP were to institute necessary reforms for a sound financial framework, there is a 75 percent chance of ending a 10-year window with a positive net balance. Looking 18-years out, there is only a 5 per-

cent chance of having a negative net balance, with a \$16B positive average balance.

Q.8. How much has FEMA paid Milliman for their work in developing Risk Rating 2.0?

A.8. FEMA paid Milliman \$10,988,650 from June 2017 to October 2020. Milliman is the leading actuarial consulting firm for natural catastrophic insurance perils. In addition of providing valuable insight into industry best practices, they provided top actuarial and geospatial talent to assist the FEMA actuaries in developing a nationwide flood rating plan, which is a very complex natural catastrophe peril.

Q.9. FEMA has acknowledged significant gaps in reliable levee risk data. It is my understanding that only one of the five or six Risk Rating 2.0 models could be adapted for use on levees.

Please provide a detailed explanation about why FEMA's evaluation will be able to accurately determine risk and risk-rated premiums behind levees.

A.9. Prior to undertaking Risk Rating 2.0, there were significant gaps in consistent levee data across the nation that could be used to assess flood risk for the purposes of rate setting. For Risk Rating 2.0, FEMA partnered with the United States Army Corps of Engineers (USACE) to close those gaps by identifying and using credible and consistently available data and methods to account for the level of risk reduction provided by levees. Through the partnership with USACE, FEMA was able to provide the first comprehensive modeling of flood risk reduction provided by levees, leading to a more reliable quantification of the remaining risk behind the nation's levees. The rates for Risk Rating 2.0 were set using this information.

- Five key data points were used to assess the risk reduction provided by a levee: levee centerline, levee crest profile, leveed area, overtopping frequency, and levee performance.
- FEMA used readily available data from the USACE-maintained National Levee Database (NLD) and the Levee Screening Tool (LST). All levees identified in the NLD (Spring 2020) were considered for Risk Rating 2.0. The NLD is a dynamic database that is continually updated.
- The quantity and quality of levee information in the NLD and LST varies, and FEMA used the most detailed and highest quality data available from these sources. Levees that USACE routinely inspects generally have more high quality and detailed information available, and that data was used for Risk Rating 2.0. For other levees lacking that detailed information, available data from the NLD was used and enhanced using consistent methods.
- For each levee, the overtopping frequency and levee performance were directly incorporated into the catastrophe models to determine average annualized losses. Leveed areas have a separate rating algorithm than nonleveed areas.
- USACE and FEMA jointly developed an approach that increased the ability to evaluate risk behind 42 percent of levees

in the country, which account for 90 percent of buildings behind levees.

- FEMA will continue working with USACE to improve levee data and to refine risk assessment methodologies in support of annual rate updates and a risk-informed NFIP.

Q.10. How can FEMA ensure that Risk Rating 2.0 will offer accurate pricing for policyholders and their premiums?

A.10. As described in FEMA's detailed documentation of the analytical basis for the rating plan found here: Risk Rating 2.0 Methodology and Data Sources Final Report ([fema.gov](https://www.fema.gov)). By using flood risk models and data from commercial catastrophe models as well as data from FEMA, USACE, the National Oceanic and Atmospheric Administration, and the United States Geological Survey, FEMA can ensure that rates reflect the best available data. Furthermore, the rating plan has been tested using historical data to ensure the flood risk aligns with NFIP's best and complete analysis.

Q.11. Technology exists today that can provide highly accurate and timely observational flood data that provides insight into what's happening on the ground during and immediately after a flood. This includes building-level flood depth and extent of the floodwaters within 24 hours of the water's peak. Leveraging this technology could be used to cut costs associated with boots-on-the-ground claims adjusting, but most importantly, it can be used to provide much faster payouts to Louisianans impacted by devastating flooding.

What is FEMA doing to leverage technology for remote claims? Are you experiencing any obstacles that Congress can assist FEMA in deploying this technology or move forward with remote claims and faster payouts?

A.11. FEMA's recently modernized System of Record—Pivot—allows for instantaneous validation of information, including eligibility for coverage, acceptance of claim information, documentation of advance payments, and business process confirmation. We can track payments to policyholders in a near real time manner and can target insurers to remove impediments, clarify guidance, and ensure policyholders are taken care of quickly.

FEMA responded to the challenges posed by the pandemic by coordinating with our privacy and cybersecurity experts, to establish guidance that would enable the NFIP Direct and our WYO partners to adjust claims remotely, and ensure adherence to the Centers for Disease Control and Prevention guidelines for the safety of both the policyholder and the adjuster when in person inspection was necessary.

FEMA published Bulletin W-20004 on April 2, 2020; it set minimum standards for remote adjusting and made such adjusting available for use by the NFIP Direct and WYOs regardless of technology formats in use. FEMA also ensured that policyholders chose remote adjusting only if it was right for them.

FEMA found that remote adjusting complimented its previously implemented process improvements. Remote adjusting helped policyholders recover sooner by expediting advance payments. When a physical inspection was necessary, remote adjusting allowed insur-

ers to issue larger advance payments prior to the onsite visit. Additionally, FEMA found that many program partners were eager to take on the challenge of remote adjusting as they do in their other lines of business.

FEMA has an interest in ensuring that Program partners and the adjusting community adopt processes that are consistent with FEMA claims guidance and ensuring that policyholders receive an equitable claim settlement to deliver on our promise to provide exceptional customer service, whether the claims were adjusted remotely or not. FEMA met with companies in advance to view the types of software to be used in remote adjusting claims. We were impressed with the type and quality of the available products including the relative ease of use.

WYOs provided product demonstrations of the third-party technology solutions they leveraged in adjusting flood and other claims, and this sector of the industry is providing high quality, easy to use products. The proprietary software utilized existing smart technology including smart phones and tablets. Adjusters interacted directly with policyholders, walking them through the process to gather the information necessary to complete the timely adjustment of claims. Using the camera on the policyholder's smart device, the policyholder would open a link that allowed the adjuster to see what the policyholder sees. Adjusters can capture photographs of water heights, damage, and confirm the type and quality of finishes. Most of the software we viewed allowed the adjuster to remotely capture room measurement and anything that could not be captured would be manually measured and provided by the policyholders. The adjuster would take the information and create an estimate to repair the documented and covered flood damage. The policyholder always has the option to request a physical inspection. FEMA does not endorse or recommend specific software but understands that this is a mature and widely used technology that will see continuous increased use and growth.

We are not experiencing any obstacles but appreciate the offer to assist.

ADDITIONAL MATERIAL SUPPLIED FOR THE RECORD

**STATEMENT SUBMITTED BY JEFFREY C. WILEY, PRESIDENT AND CEO,
FORT BEND ECONOMIC DEVELOPMENT COUNCIL, SUGAR LAND,
TEXAS**



TESTIMONY OF JEFFREY C. WILEY

PRESIDENT AND CEO, FORT BEND ECONOMIC DEVELOPMENT COUNCIL

SUGAR LAND, TEXAS

SUBMITTED TO

UNITED STATES SENATE COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

"REAUTHORIZATION OF THE NATIONAL FLOOD INSURANCE PROGRAM: PART I"

MAY 18, 2021

The following statement is presented on behalf of the Greater Fort Bend Economic Development Council (FBEDC), Fort Bend Flood Management Association (FBFMA), and Fort Bend County Levee Improvement District No. 2 (FBCLID 2).

FBEDC is a public-private partnership established in 1986 to promote quality growth including business recruitment and retention, business climate, master planned community development, and high value infrastructure necessary to support quality growth in Fort Bend County, Texas.

FBFMA is a non-profit corporation organized in 2009 under the laws of the State of Texas. We cooperate with FEMA, USACE, and other federal, state, and local agencies to hasten the accomplishment of economic flood risk reduction and management in Fort Bend County.

FBCLID 2 is responsible for providing flood protection and storm water management services for more than \$5 billion worth of property and structures in the City of Sugar Land. The District protects more than 5,300 acres of property while operating and maintaining 11 miles of levees, 8 miles of drainage ditches and two pump stations.

Fort Bend County, Texas

Fort Bend County occupies 862 square miles of Gulf Coastal plain along the Brazos River on the southwest side of the Houston metropolitan area. Since the 1970s, Fort Bend has maintained one of the fastest county growth rates in the United States with a population that has almost tripled since 2000 to nearly 900,000 residents today. Residents in Fort Bend County enjoy the



benefit of a community diverse in its cultures, cities, people, and lifestyles. We have recently been identified as one of the most ethnically and racially diverse counties in the United States with a 2020 ESRI [diversity](#) index of 81 percent.

One of the key factors in Fort Bend's immense success is its award-winning master planned communities. These outstanding communities provide some of the finest amenities available, including nature parks, green belts, lakes, golf courses, hike and bike trails, and community education. The average household income in Fort Bend County is \$125,000, and we have 279,000 housing units that are 78 percent owner occupied. ESRI calculates our 2020 housing [affordability](#) index at 152, meaning a family earning the median income has 152 percent of the income necessary to qualify for a median-priced home in Fort Bend County. Our communities boast a tremendous quality of life, with exceptional schools and varied recreation. Our educated and highly skilled workforce is the number one reason businesses report moving to and expanding in Fort Bend County. Fort Bend County is regularly listed among the top-ranked places in the country to live, work, and raise a family.

Fort Bend County Infrastructure

The Fort Bend County success story is built on our decades-long commitment to careful planning and high-quality infrastructure that increases our safety, improves our efficiency, protects property values, and minimizes our impact on the environment. We have never forgotten that public safety is the most important task of local government. Local planning and investment to reduce flooding and improve mobility are our priorities and the foundation underlying the health and welfare of our residents, affordable housing, and job creation.

Flood Protection Systems

The sustainability of Fort Bend County is intertwined with its 19 major levee systems. Nearly 100 miles of levees in Fort Bend County help to protect more than 240,000 residents and \$27 billion worth of property value, of which more than \$21 billion are residential and commercial structures. Our levee systems are locally funded, and we have invested more than \$750 million to finance their design and construction. Levee districts in Fort Bend County have neither sought nor received any Federal money to construct, operate, or maintain area levee systems or other related flood control works.

To be recognized by FEMA under the National Flood Insurance Program (NFIP) as providing protection from the 100-year flood on Flood Insurance Rate Maps, levee systems must meet minimum design, operation, and maintenance requirements set by FEMA. Levees and other related flood control works in Fort Bend County have been engineered and constructed to the highest national and local standards. In addition to being accredited by FEMA under the NFIP as protecting to the 100-year flood, Fort Bend County imposes additional requirements that



generally enable area systems to achieve protection against the 250-year flood or greater, known locally as the "Fort Bend Foot."

Floodplain Management

As described by FEMA, the [Community Rating System \(CRS\)](#) is a voluntary program recognizing and encouraging community floodplain management practices that exceed the minimum land use and control requirements of the NFIP. Of the more than 22,000 NFIP participant communities in 56 states and jurisdictions, a subset of approximately 1,500 communities are enrolled in the CRS, including the cities of Sugar Land and Missouri City, the two largest cities in Fort Bend County.

The CRS program is intended to incentivize the reduction of flood and erosion risk, as well as the adoption of more effective measures to protect natural and beneficial floodplain functions. FEMA awards points that assign a community's "class" rating in the CRS on a scale of 1 to 10, with 1 being the highest ranking. Points are awarded for an array of improvements for how the community informs its public on flood risk; maps and regulates its floodplain; reduces possible flood damage; and provides warnings and responds to flooding incidents.

The City of Sugar Land currently has a CRS class rating of 7, earning its NFIP policy holders in a special flood hazard area a 15 percent discount on premiums. In July of this year, after the City's Hazard Mitigation Plan is formally adopted, it is expected that Sugar Land will improve its CRS class rating to 6, thereby further increasing that policy discount to 20 percent. Missouri City also has attained a class 7 CRS rating and is working on projects like its new Flood Alert System to improve its CRS rating.

In a 2018 post-Hurricane Harvey [report](#) published by the Rice University Baker Institute for Public Policy, it was recommended that a neighboring county adopt the more stringent development regulations that are applied in Fort Bend County. The optimal Fort Bend approach demonstrates that the separate and distinct missions of flood control and flood plain management can serve as the tandem components of successful, economic flood protection.

FEMA Risk Rating 2.0

The geography and history of Fort Bend County make clear that our future is tied to successful flood damage reduction and access to affordable flood hazard insurance. These interdependent aims have guided decision making in Fort Bend County almost since inception of the NFIP. Our significant local investment in federally recognized flood projects and local adoption and enforcement of floodplain management standards that exceed minimum Federal requirements have given rise to more than \$27 billion in land and improvements across Fort Bend County. **We are concerned that the value of these investments and our future are being**



threatened by ill-conceived Federal policy proposals, including the FEMA “Risk Rating 2.0: Equity in Action” overhaul of NFIP rate calculation practices.

Data Gap

The drastic changes by FEMA under Risk Rating 2.0, ostensibly being proposed to better reflect flood risk using a blend of public and proprietary information and tools, are alarmingly devoid of requisite underlying data and assumptions. We are reminded of the regrettable outcomes that arose from implementation of rate reforms authorized in the Flood Insurance Reform and Modernization Act of 2012. The immediate, exorbitant premium rate increases prompted Congress to act in 2014. Clearly the unprecedented overhaul now being contemplated by FEMA through Risk Rating 2.0, which risks precipitous declines in residential and commercial property values with derivative impacts, warrants close scrutiny.

The internally developed Risk Rating 2.0 plan lacks the transparency that policyholders require to test FEMA methodologies and verify the accuracy and fairness of their future rates.

The minimum data needed for communities to assess Risk Rating 2.0 include—

1. The flood elevations and flood frequency curves at the locations in each community used (or assumed) to generate the full array of premiums from rating factors
2. The estimated average annual losses (with confidence intervals or error bands) at the locations in each community used to develop the premiums
3. The results of the “generalized linear models” used to develop the rating factors based on such parameters as “distance from the water,” “elevation above the water,” “foundation type,” etc., including the confidence intervals, error bands and p-values (i.e., measure of the probability that an observed difference could have occurred just by random chance) for the estimates
4. Documentation of how the flood and storm models use Monte Carlo methods to draw artificial years from an imaginary set of probability relationships together with the assumed events, consequences, and probabilities (Casino Premiums) to forecast possible outcomes
5. The extent to which estimates of premiums reflect modeled events, consequences and probabilities that have rarely, perhaps never, occurred in the flood history, e.g., levee failures and over-topping, as yet unobserved flood flows, as yet unobserved flood stages, etc.

Until such time that requisite information is made publicly available, FEMA should not proceed with implementation of Risk Rating 2.0.



Application of Information Quality Act to Risk Rating 2.0

FEMA should comply with the Information Quality Act by developing Risk Rating 2.0 to be transparent and reproducible. We ought not rely on opaque and bewildering proprietary data and models from third-party contractors as is done under the current Risk Rating 2.0. FEMA should conduct and make available peer reviews of all scientific assessments and models used to support Risk Rating 2.0.

Until such time that the transparency and reproducibility requirements of the Information Quality Act are fulfilled, FEMA should not proceed with implementation of Risk Rating 2.0.

Risk Rating 2.0 Limits Policyholder Appeals

As explained recently by the Congressional Research Service in a March 12, 2021, report for Congress (Report No. [R45999](#))—

Flood zones are to no longer be used in calculating a property's flood insurance premium following the introduction of Risk Rating 2.0; instead, the premiums are to be calculated based on the specific features of an individual property. However, as proposed, flood zones will still be needed for floodplain management purposes; for example, all new construction and substantial improvements to buildings in Zone V must be elevated on pilings, posts, piers, or columns. The boundary of the SFHA will still be required for the mandatory purchase requirement. The FIRM map appeal process will still exist, but once Risk Rating 2.0 begins, map appeals are not to have any effect on the premium that a policyholder pays. [emphasis added]

Thus, the Risk Rating 2.0 decoupling of flood zones and the policy premiums for a property would seem to install new, unacceptable limitations on a policyholder's ability to appeal the new FEMA-assigned rate.

Public Notice and Comment

Although NFIP rate-setting authority was granted by Congress to the Administrator of FEMA, it seems unlikely that the biggest change in how flood insurance premiums are calculated in the NFIP since its inception in 1968 was contemplated or should be allowed without congressional involvement.

Until such time that FEMA solicits and considers public comment consistent with the Administrative Procedure Act, the agency should not proceed with Risk Rating 2.0.



Residual Risk Behind Levees

In April the House Financial Services Committee released a NFIP Discussion Draft containing a provision (Sec. 209) that, if passed, would direct FEMA to establish a “New Zone for Levee-Impacted Areas”. The language is problematic because it—

- 1) represents a sudden hard turn on decades-long policy for leveed areas that essentially mandates a new form of taxation in the guise of arbitrary insurance premiums, seemingly levied for revenue rather than actuarial purposes;
- 2) would incentivize residents to demand levee districts, after satisfying debt service obligations, cease levying taxes for operation and maintenance and instead rely solely on the “protection” provided by the NFIP to avoid paying a tax for levee maintenance and another for flood hazard coverage; and
- 3) would result in a precipitous decline in residential and commercial property values, depressed realtor commissions, reduction in overall taxable market value, necessitate reduction in governmental services or increased tax rates, and frustrate local performance of sound community floodplain management practices.

The effect of the new language will be to keep communities that invested in levees from deriving their full benefit, which is understood to be that a well-built and well-maintained levee affords reliable flood protection, allows for reasonable local governance of land use and floodplain management, and avoids mandatory purchase of flood insurance in areas sufficiently protected from flood. These concerns should be addressed as follows--

- 1) for levees FEMA-accredited or provisionally accredited, prevention of the mandatory purchase or floodplain management requirements in the leveed area; and
- 2) for all levee-protected areas, the use of Administrative Procedure Act rulemaking to establish a new rate structure so to ensure the use of sound methodology, quality source data, and provide for proper vetting through public notice and comment, as well as begin establishment of the administrative record.



Conclusion

We have laws and administrative [guidelines](#) promulgated by OMB to protect the quality, objectivity, utility, and integrity of information disseminated and used by Federal agencies. There are longstanding, bipartisan administrative requirements in place under the Administrative Procedure Act that are there to ensure good government and open and transparent consideration of regulatory actions. These requirements are being bypassed as the agencies seek to overhaul their treatment of levees in Federal programs. Both FEMA and the U.S. Army Corps of Engineers, who are working together on key NFIP elements, continue to restrict public information disclosure, formal peer review and solicitation and consideration of public input. Too many of these important public protections are being set aside.

Some proponents find that the FEMA Risk Rating 2.0 proposal represents change that is "long overdue" and that Risk Rating 2.0 should "increase public confidence in the program" while "putting NFIP on stronger financial footing." Others, including FEMA, are making similar claims about the need to charge rates that more accurately reflect risk. All of those statements might be true, but no one can know because the core underlying data and assumptions used to produce Risk Rating 2.0 have not been made available and there can be no confidence that new premiums are reproducible for an individual property or that leveed areas are comparably and fairly treated.

We request that Congress step in before it is too late. Until such time that FEMA fills the public Risk Rating 2.0 data gaps, abides by the terms of peer review and reproducibility under the Information Quality Act, reinstates effective rights of appeal for policyholder premium-setting, and guarantees meaningful public participation opportunities through rulemaking, Risk Rating 2.0 should not go forward.

Thank you for the opportunity to submit these views.