

**FEDERAL FUNDING, STATE ACTION:  
CONNECTING THE DOTS TO  
BUILD FLOOD RESILIENCE**

*SYNTHESIS OF THE JUNE 14-15, 2022 WORKSHOP*

*COMPILED BY COUNCIL OAK FOR THE PEW CHARITABLE TRUSTS*

COUNCIL  OAK

***THIS SUMMARY*** of the 2022 Federal Funding, State Action: Connecting the Dots to Build Flood Resilience two-day workshop was compiled by Council Oak for The Pew Charitable Trusts' Flood-Prepared Communities initiative. Federal Funding, State Action: Connecting the Dots to Build Flood Resilience was attended by representatives from the following agencies and offices.

## STATES

- Connecticut Department of Energy and Environmental Protection, Office of Climate Planning
- Florida Department of Environmental Protection, Office of Resilience and Coastal Protection
- State of Florida Governor's Office
- State of Louisiana Governor's Office
- Louisiana Office of Community Development, Economic Development & Infrastructure Programs
- Maryland Department of Transportation, Office of Climate
- Maryland Department of the Environment
- New York Department of Environmental Conservation
- North Carolina Office of Recovery and Resiliency
- North Carolina Department of Environmental Quality
- Oklahoma Water Resource Board
- Rhode Island Infrastructure Bank
- South Carolina Office of Resilience
- Virginia Department of Conservation and Recreation
- West Virginia State Resiliency Office
- Washington Department of Natural Resources
- Washington Department of Commerce

## FEDERAL AGENCIES

- Federal Emergency Management Agency
- National Institute of Standards and Technology
- National Oceanic and Atmospheric Administration
- U.S. Army Corps of Engineers
- U.S. Department of Agriculture
- U.S. Department of Housing and Urban Development
- U.S. Department of Transportation
- U.S. Environmental Protection Agency
- U.S. Geological Survey
- The White House Council on Environmental Quality
- The White House Office of Science and Technology

## NONPROFITS AND ACADEMIC INSTITUTIONS

- Enterprise Community Partners
- National Fish & Wildlife Foundation
- National Institute of Building Sciences
- Virginia Institute of Marine Science

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### EXECUTIVE SUMMARY

The Pew Charitable Trusts (Pew) hosted a two-day convening of state and federal resilience leaders and select subject-matter experts to discuss practices advancing state-led efforts to assess, plan for, and reduce flood risks.

The event kicked off with representatives from each of the twelve participating states outlining challenges, current planning efforts, and near-term prospects for flood resilience in their respective states. Next, representatives from the White House, the U.S. Department of Transportation (DOT), and the Federal Emergency Management Agency (FEMA) described federal resilience priorities during a Federal Roundtable and set the stage for federal-state joint breakout group conversations. In breakout discussions, federal and state officials workshopped how states can best inform federal rules governing existing and new pools of resources and how states can most effectively leverage those resources toward the development and implementation of statewide plans.

The breakout sessions focused on planning for flooding (Workshop #1), identifying solutions (Workshop #2), and implementation and funding (Workshop #3). This meeting summary will focus on the discussions and take-aways of the six concurrent breakout sessions.

### Overarching Findings: Challenges and Solutions

**Limited state and local capacity constrain proactive planning and pre-disaster investment.** State officials expressed feeling hamstrung by inadequate staff and funding dedicated to climate and flood resilience activities. All states additionally expressed concern about limited capacity within local government. As a result, participants cited deficiencies in several aspects germane to flood preparedness including data collection, planning, securing funding, and implementation. State officials expressed concern that capacity issues across government may lead to a scenario in which communities are ill prepared to invest in flood mitigation planning and projects adhering to timelines mandated in recent federal funding mechanisms,

including the American Rescue Plan Act (ARPA) and the Infrastructure Investment and Jobs Act (IIJA, also known as the Bipartisan Infrastructure Law (BIL)), both of which were enacted in 2021.

### **Communities are challenged by gaps in data and a lack of understanding of how to use available data.**

Communities may lack a clear understanding of available data sources and how those sources can be used to assess risks and develop solutions. State participants expressed that many of the local communities they work with struggle to downscale data for local planning purposes. Furthermore, state and local governments struggle to keep up with new data sources coming online, and with how to best use that data in funding applications. Participants expressed a desire for federal, state, and academic partners to work together to develop central data repositories, and coordinate on the rollout of new tools and data.

### **Federal resilience programs and funding do not contemplate how state and local officials can most effectively access and leverage these resources.**

When new federal funding and programs are rolled out, guidance and rules focus on federal objectives, missing an opportunity to ease local or state access to funding and build a relationship between funder and the implementing agency. Federal agencies must partner with states prior to issuance of guidance and program rules to understand their needs and work directly with communities to ensure resources can be directed where they are most needed. Similarly, states need to take on the same partner role, working closely with the most at risk and disadvantaged local communities, where the capacity to respond to federal funding opportunities is most lacking.

**Applying for federal funding opportunities can be time-consuming and complicated.** The federal grant application process, from investigating available grant opportunities and determining eligibility through submitting a full application, presents a daunting challenge to many states and local communities. To help communities proactively track and apply for grants, state, federal, and academic partners should develop a

database of available grant funds across federal agencies and philanthropic sources, filterable by project type and eligibility requirements. Simplifying and streamlining grant requirements and standardizing application and monitoring processes would encourage state and local governments to apply for a wider array of resources. Additionally, many existing federal funding streams are only available to certain state agencies who may not be the agency responsible for that state's resilience activities.

**Federal funding, planning, and implementation processes are often reactive to disasters, deemphasizing local pre-disaster planning and mitigation.** While trends are shifting toward increased investment in pre-disaster mitigation and resilience frameworks, the majority of federal disaster assistance that can be applied to resilience projects remains tied to post-disaster programs. This is compounded by the federal government's historic emphasis on response and recovery, a mindset reflected at the state and local levels. As a result, proactive, forward-looking flood resilience action remains a lesser priority and states and localities are failing to take action to keep up with degrading climatic conditions. Additionally, guidance and requirements for funding that can be used to invest in flood resilience, such as through IJJA, are often confusing for officials that have less experience in resilience and pre-disaster investments. This may further hinder the effectiveness of these programs if communities and states are concerned about eligible uses and potential penalties if strict rules are not adhered to. The culmination of these factors makes it difficult for states to use available resources to holistically address risk.

## STATE INTRODUCTIONS

On the first day of the workshop, state representatives from Connecticut, Florida, Louisiana, Maryland, New York, North Carolina, Oklahoma, Rhode Island, South Carolina, Virginia, Washington, and West Virginia gave presentations on current flood resilience efforts in their states, sharing successes and identifying obstacles to overcome. The officials in attendance were managers and administrators of flood resilience programs and were often responsible

for advising, leading, and collaborating across state agencies and other nonfederal partners.

Attending states represented members of The Pew Charitable Trusts' State Resilience Planning Group, a network of fifteen states that are developing statewide flood resilience plans and incorporating flood resilience into other planning processes, such as hazard mitigation and coastal management. The states represented all stages of planning – from early-phase efforts in Oklahoma and West Virginia, to states like Louisiana and Rhode Island that had completed plans and are in update and refinement phases of their planning cycles. The twelve states in attendance experienced a wide range of flood challenges including coastal surge flooding, sea level rise, inland riverine flooding, and an array of topographic and development issues contributing to flood risk.

## FEDERAL ROUNDTABLE

Participants also heard from federal entities leading resilience efforts on behalf of the White House, the U.S. Department of Transportation (DOT), and the Federal Emergency Management Agency (FEMA). From the White House, David Hayes, Special Assistant to the President for Climate Policy, provided an overview of the Biden Administration's initiatives and priorities. Deputy Assistant Secretary for Climate Policy at DOT, Andrew Wishnia, updated participants on the efforts underway to integrate resilience principles into DOT projects. FEMA's Associate Administrator for Resilience, Victoria Salinas, reviewed the efforts at FEMA to prioritize resilience and equity in disaster recovery and mitigation.

Each federal roundtable participant emphasized that the federal government recognizes that it has an increased role to play in bringing climate information together and making it more broadly available. In addition to response and investment strategies, developing and implementing resiliency strategies are an increased focus of the Administration and each of the federal agencies through their agency's mission lens. The White House is leading the "whole of government" response through the National Climate Task Force, encompassing several

interagency working groups and networks. Under IIJA, federal agencies have a historic level of funding to devote to reducing greenhouse gas emissions and investing in resilient infrastructure. While they recognize the great challenge, they also recognize the opportunity to bring in new partners to ensure benefits are more equitably distributed. DOT and FEMA both emphasized their commitment to the Administration's focus on delivering benefits to vulnerable communities and highlighted agency initiatives and programs to advance access, as well as community and infrastructure resilience.

### BREAKOUT WORKSHOPS FOR STATE AND FEDERAL OFFICIALS

The majority of the convening consisted of a series of three workshops to discuss how states can best inform federal rules governing existing and new resources and how states can most effectively leverage tools, funding, and support from the federal government to develop and implement statewide plans. Participants were divided into six groups of approximately eight, each with a mix of federal, state, and non-governmental representatives. During each workshop session, participants were asked a series of questions to prompt group discussion. It should be noted that not every group addressed every question in each session. Below is a summary of the common themes discussed and key takeaways from each breakout session.

#### Workshop #1: Planning Today for the Floods of Tomorrow

This workshop focused on data, risk assessment, visualization, community engagement, awareness, and capacity building, as well as the various challenges and limitations the states encounter. Participants discussed their experiences developing plans that assess flood risk and identify targeted mitigation and resilience objectives accounting for current and projected flood risk. Themes explored include:

**Addressing data gaps:** While there is an abundance of available tools, data from different agencies and at different scales are often difficult to align to be useful

toward planning goals. At the state level, it can be difficult to get an accurate picture of flood resilience in transboundary watersheds. Resolving this issue requires communication, coordination, and shared funding across jurisdictions and through multi-state partnerships. This issue also applies at the local level, creating opportunity for multi-jurisdictional flood risk assessments and regional-scale flood mitigation projects. Furthermore, data deficiencies are often based on historical biases and the lack of investment in marginalized communities. More data collection and study of flood risk has occurred in wealthy, coastal, and urban areas leaving lower-income, rural, inland, and historically marginalized populations with insufficient information to make decisions about flood resilience. These biases need to be corrected to address these deficiencies; many communities are looking to do this within the current tools available to them to avoid duplications and redundancy. However, it is important to recognize that where lack of resources and interest in data intersect with historically marginalized communities, current tools may not offer the greatest applicability or fidelity.

**Funding data collection and use:** States and communities found it difficult to secure funding for data collection, analysis, management, and maintenance that form the foundation of flood resilience planning and programs. States and localities should consult with others (such as nonprofits or academia) to identify funding sources. States can support communities by consolidating and providing data and resources to localities.

**Providing data that is useful for risk visualization, communication, and planning decisions:** To optimize effectiveness in the field, tools need to be helpful to both states and localities at the levels of detail at which they are working. Consistent methodologies, clear guidance on how to incorporate and use specific data or models (e.g., for federal funding applications), and forward-focusing tools support a cohesive approach to planning. To the extent possible, standardization of data allows for communities with limited resources to more easily collaborate and coordinate the efficient use of resources to collect, process, visualize, and analyze data

and perform risk assessments. Standardization of data communication practices (e.g., color schemes, improved graphics, usage of scenario modeling projections, crisis experiences) can help communities communicate the story the data is telling (e.g., flood severity).

### **Engaging communities and building awareness:**

Community engagement and awareness can be built using trust, resources (e.g., public facing tools), and information, though in many cases nontraditional channels need to be pursued to reach historically marginalized communities since traditional outreach only reaches those traditionally involved.

### **Helping communities navigate available data and**

**tools:** There are countless tools, resources, and datasets from federal, state, NGO, and academic sources. However, the volume of resources makes it difficult to determine which specific resources and tools will best apply to planning efforts in individual states and localities. Ensuring that new data is standardized across sources and is scalable is important, but it is also important for those who compiled and created those data sources to work directly with potential end users, helping those users leverage data into thoughtful plans.

### **Supporting local decision-making and planning in**

**uncertainty:** Decision making is dependent on future conditions, but these projections change, and the future is uncertain. Planners need to consider other changing elements (e.g., social vulnerability, climate change, modernizing the economics of investment) and approaches to considering those elements when determining risk. Planners also need guidance on how to read and use scientific data sources that do project future risk. For example, an intensity, frequency, and duration (IDF) curve may be commonplace in the worlds of engineering and modeling but may not be as native to those responsible for developing plans. Ensuring engineers and modelers are actively working with planners and other resilience officials to fill this knowledge gap is essential to creating effective, implementable plans.

### **Helping communities determine the first and most**

**important steps:** Communities need assistance via

tools that can help them assess and prioritize risks and projects. Projecting future risk is one of the more difficult challenges communities encounter in their planning efforts. Risk assessments are most accurate and effective when conducted locally, as opposed to at the county or state level.

**Supporting community recovery planning:** Pre-disaster planning and having ready-to-go, off-the-shelf projects and plans for communities to implement can set communities up to immediately respond and leverage interest and funding in the wake of a disaster.

## **Workshop #2: Developing Solutions for a Flood-Resilient Future**

Participants discussed how states and localities can develop actionable flood resilience solutions. In many cases, plans exist at a conceptual scale, but funding applications often require architectural or civil design to adequately scope these concepts, project future benefits, and develop reasonable cost estimates for a grant application. Across the breakout groups, participants discussed the following strategies to fill gaps in project development:

### **Leveraging current funding sources and overcoming**

**limitations:** Participants shared examples of matching federal programs and funding sources to individual projects, assembling multiple agencies to create a comprehensive solution, and leveraging public and private funding (e.g., using Community Development Block Grants (CDBG) funding as matching dollars when able). Participants expressed general frustration in the pace of federal project development and funding; resources may sit for years both during the application process and after grants are awarded. This results in an inefficient implementation of these resources, particularly because project staff can turnover while waiting for funding, and time and energy must be devoted to orienting new staff.

**Thinking across jurisdictional boundaries:** Flood planning at the local or community level can only be successful alongside multi-jurisdictional planning on the watershed scale. States can incorporate watershed-level

planning into state resilience plan development. Many federal funding sources are only available to units of government, such as state or local government, which is further complicated in “home rule” states.<sup>1</sup> A broader cross-jurisdictional approach can also be usefully applied to hazards other than flooding, but such approaches are challenging in the current funding and policy environment.

**Moving beyond the disaster-response focus:** State and federal funding often remains focused on disaster response and recovery and does not encourage proactive flood risk management. This has contributed to a landscape where recovery, mitigation, and resilience planning has primarily occurred in places with past disasters. Even after a disaster, communities may still miss out on recovery funds if they do not have information like parcel data and property values to measure damage. Communities continue to expect post-disaster funding from the federal government and perceive this funding as much more straightforward to receive as funds are typically allocated based on damage, as opposed to on a competitive or formula basis.

**Leveraging increased federal investment in disaster resilience:** States have the opportunity to set themselves up for success long after funds from recent unprecedented federal investments in disaster resilience (such as included in the IIJA) run out. Specific to IIJA, state participants emphasized the need to prioritize shovel ready projects in the near term while commencing long-term planning efforts now to establish a successful foundation by the time IIJA funds expire after FY26 that can continue to support resilience projects in the longer term.

**State and federal opportunities to bolster local capacity:** Localities need support collecting data and taking initial resilience planning steps prior to a disaster. States have worked directly with communities to support identification of potential flood solutions through a variety of approaches including:

- In Virginia, state-led outreach spurred communities to apply to the *Virginia Community Flood Preparedness Fund* for capacity-building and resilience planning grants allowing recipients to hire consultants in support of local risk assessment and planning activities.
- Washington State Department of Commerce offers a formula grant to support legally required local comprehensive planning. The grant is available two years in advance of when a local comprehensive plan must be completed (which is on an eight-year recurring cycle). Many communities use this money to hire consultants for plan updates, and some choose to incorporate climate resilience planning as part of these broader efforts.
- The *North Carolina Flood Resiliency Blueprint* will provide detailed information about local flood risk, and help communities prioritize efficient and effective projects for federal funding opportunities.
- In New York, the Division of Water helps design projects for municipalities and localities that do not have the capacity to do so, often in partnership with Regional Economic and Development Councils.

**Getting ready to apply for funding:** State agencies can work with localities to embed resilience goals in their planning documents, which will help set them up for greater success when they pursue federal funding opportunities. States can also play a role in educating communities about connecting comprehensive planning and resilience planning. For example, in Washington State, the Department of Ecology provides assistance for planning and building projects, and the Department of Commerce helps localities write resilience goals into their planning documents, in anticipation of FEMA and DOT reviewing those goals in concert with reviewing local resilience grant applications.

<sup>1</sup> Home rule provisions delegate power from the state down to sub-units of government such as counties, municipalities, and towns. This increased local autonomy can limit the degree of state interference in local decisions and projects. On the other end of the governance spectrum is Dillon's Rule, in which sub-units of government "can exercise only the powers explicitly granted to them" by the state government (National League of Cities, 2022).

**Natural and nature-based features for improved resilience:** A lack of available data on the long-term performance, durability, and benefits of nonstructural, natural, and nature-based flood risk management measures presents a barrier to deploying such measures at the local level. Limited application of nature-based solutions in flood prone environments and geographically dispersed benefits realized over an extended timeline challenges the traditional benefit-cost analysis process. Increased data collection and monitoring, and more flexibility and encouragement to explore and test nature-based approaches, would help expand the use of nature-based solutions.

### Workshop #3: Making it Real: Equitable Implementation

The final workshop of the two-day convening explored existing barriers to leveraging resources to implement plans and projects, particularly in low-capacity communities and to the benefit of disadvantaged people and communities. The following themes emerged during group discussions:

**Expanding data access and usability:** Federal officials shared recent progress on expanding data access, including FEMA’s efforts to develop a nationwide dataset of baseline risk for multiple hazards. Additionally, the National Weather Service (NWS) plans to roll out real-time inundation mapping for 3.4 million miles of waterways over the next four years. Continued coordination amongst federal agencies, with a particular focus on how states and communities will use these new data sources, can amplify their utility in planning and implementation efforts. Additional data from the private sector, including from the *First Street Foundation*, can be useful for flood resilience work, but state participants indicated a higher degree of public trust in government datasets.

**Targeting funding to match needs:** States struggle with connecting the most vulnerable communities to funding sources that meet their specific needs. Many states expressed desire to see a plug-and-play grant application accepted by multiple federal programs and

agencies, easing application burdens and potentially allowing for application of multiple grants at once. Similarly, participants expressed the need for a nationwide “roadmap to resilience” to help communities identify appropriate funding sources supporting each phase of state, regional, and local resilience planning and implementation. A few examples at the federal and state local intended to address the need include:

- The *FEMA Recovery and Resilience Resource Library* provides a platform allowing potential grantees to search for federal funding resources by keyword and filter by classes of eligibility.
- New York State’s Climate Smart Communities Program relies on a *Consolidated Funding Application* to streamline and expedite the grant application process across several program areas in New York. The CFA allows communities to access multiple state funding streams, including regional economic development, environmental, infrastructure investment and other programs.

Supporting local grant applications and implementation: Many states report that local communities struggle to navigate federal grant applications and are often ill-prepared to address reporting requirements once grant funds are successfully awarded. Participants indicated the need to simplify application and reporting requirements and refine, clarify, and streamline requirements across multiple programs. Additionally, a few states mentioned they are putting in place new “regional resilience coordinators” to help better understand local needs and educate local leaders on flood risk, helping those communities develop plans and applications for funding. Participants also discussed the barriers surrounding resources to pay for feasibility, including procuring the right information needed to fill out the grant application. Often, consultants are hired who are not familiar with the area in question or the communities impacted, and go into the localities with little knowledge and less-than-great track records.

### **Building capacity to engage marginalized**

**communities:** Participants discussed casting a wide net to develop networks of partnerships that may assist in expanding engagement efforts in marginalized communities. Universities in particular were highlighted as effective partners, and participants suggested that outreach to Historically Black Colleges and Universities (HBCUs) could have a beneficial impact on capacity issues in some under resourced locales. Additionally, some states, including Washington State, are leveraging AmeriCorps to hire fellows with a focus on capacity building in local governments. Regional resilience coordinators (mentioned in paragraph above) could be valuable resources for building and strengthening relationships in these engagement efforts in marginalized communities.

### **Additional local challenges to accessing and utilizing**

**federal funds:** Federal grant opportunities do not always align with local budget considerations, complicating a local government's ability to assess whether it will have available matching funding and staff capacity. At the time they are being asked for matching funds by a federal grant, they may not know yet what their annual budget will look like. The "match" is one of the largest barriers to community grant participation. Programs with low or no-match options targeted for the most vulnerable communities can help to increase participation in underserved communities.

**Leveraging existing networks:** Akin to difficulties understanding and accessing datasets and tools and an array of funding options, states and localities are also struggling to utilize labyrinthine networks that can be difficult and overwhelming to navigate and plug into. Numerous examples of underutilized existing networks were mentioned, including:

- NOAA's National Estuarine Research Reserve System (NERRS), Sea Grant, and Regional Integrated Sciences and Assessment (RISA) programs.

- USDA's extension programs and Cooperative Research and Rural Development initiatives.
- USACE-coordinated state Silver Jackets teams.

However, these programs also often face capacity limitations, and greater staff and funding resources could support proactive outreach to vulnerable communities, network-weaving among experts and local leaders, initiating regional projects and partnerships, and coordination between all levels of government.