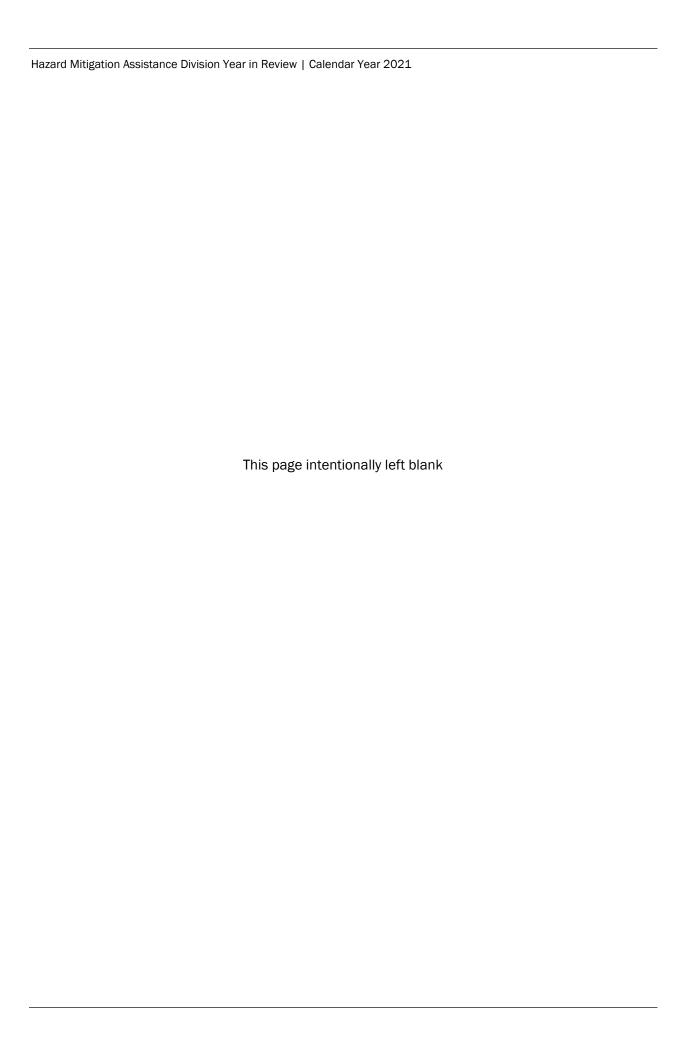


# Hazard Mitigation Assistance Division Year in Review

Calendar Year 2021





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#### Who We Are and What We Do

## 1. Hazard Mitigation Assistance Vision, Mission, and Values

The Hazard Mitigation Assistance (HMA) Division is part of the Federal Emergency Management Agency (FEMA) and the Federal Insurance and Mitigation Administration (FIMA). Two overarching principles influence HMA goals and objectives: first, we will deliver our programs with equity, and second, we will incorporate future conditions into all of our work by developing climate resilience through systems-based, community-wide investments in climate adaptation. Guided by our strategic framework, we seek to incorporate five areas of impact into everything that we do: (1) reduce risk, (2) promote equity, (3) build capacity, (4) foster connections, and (5) value our people. The framework inspires and guides the HMA Division in the work that we do each day to make communities safer, as outlined in the following sections.

HMA has nearly 400 dedicated staff across the country who work closely with federal partners and support state, local, tribal, and territorial governments to reduce nationwide vulnerability to disasters and natural hazards. Our **vision** is to help build a prepared and resilient nation, while our **mission** is to help people reduce disaster risk through partnerships and mitigation investments to increase resilience. Our **values** align with the FEMA core values of compassion, fairness, integrity, and respect, and we additionally seek to promote equity, efficiency, and collaboration in achieving our mission.

## 2. The Hazard Mitigation Assistance Strategic Framework

Hazard mitigation is any action taken to reduce or eliminate long-term risk to people and property from natural disasters and hazards. This includes measures such as building safely within a floodplain, removing homes from high hazard areas, and engineering buildings and other infrastructure to withstand earthquakes. Hazard mitigation projects have one key theme in common: they can significantly reduce the impact of disasters and natural hazards on people's lives and communities.

The Hazard Mitigation Division (HMA) Division oversees the delivery of the following grant programs that provide state, local, tribal, and territorial governments with mitigation funding. These grants are:

- Hazard Mitigation Grant Program (HMGP)
- Hazard Mitigation Grant Program Post Fire (HMGP Post Fire)
- Flood Mitigation Assistance (FMA)

Building Resilient Infrastructure and Communities (BRIC)

The Pre-Disaster Mitigation (PDM) grant program was replaced by the BRIC program for new funding beginning in fiscal year (FY) 2020; projects awarded with FY 2019 funding and prior will continue to be monitored until they are completed and closed out. In addition, HMA continues to enhance coordination with FEMA's Public Assistance (PA) Division, which supports communities' recovery from major disasters by providing mitigation funding opportunities to restore and strengthen public infrastructure.

This past year, HMA built upon our vision and mission by developing a strategic framework that incorporates our values and goals and outlines the impact we aspire to make through the important work that we do. The HMA Strategic Framework guides our efforts to build a more resilient nation.



Figure 1. This table details the Hazard Mitigation Assistance Strategic Framework for FY2022-2023 that presents the HMA vision, mission, and values; HMA impact statements; and HMA goals that guide the program's efforts to create a more resilient nation.

#### 3. 2021 HMA Program Highlights

On Nov. 8, 2021, President Joseph R. Biden, Jr. signed the Infrastructure Investment and Jobs Act (IIJA), a legislation allowing \$1.2 trillion to tackle the climate crisis and strengthen the nation's resilience. This includes nearly \$5 billion in new funding for FEMA's mitigation programs that will strengthen resilience in communities nationwide.

These funds complement award programs that FEMA has administered to make the nation more resilient. In August 2021, the Biden Administration committed \$3.46 billion through HMGP across the 59 major disaster declarations issued due to the COVID-19 global pandemic. In addition, the Administration also committed \$1.16 billion in May 2021 for the Building Resilient Infrastructure and Communities and Flood Mitigation Assistance grant programs in the FY 2021 application cycle.

With the historic commitment of \$3.46 billion in additional Hazard Mitigation Grant Program funds, the HMA Division continues to focus on providing the technical support and workforce to meet these new challenges, and leveraging historic funding amounts to bring about a transformational change in mitigation.

In coordination with our regional staff, the HMA Division has approved HMA grants, delivering record funding totaling over \$1.5 billion in FY 2021. Combined with the mitigation funding available through PA Mitigation, the number is more than \$2.34 billion. <sup>1</sup>

FEMA has monitored and responded to challenges associated with the COVID-19 pandemic for the second year in a row. HMA has continued to meet challenges by leveraging technology to the greatest extent possible to deliver the agency's grant programs while preserving the safety of the workforce and disaster survivors. Throughout FEMA's programs, we remain committed to reduce disaster suffering and deliver our programs with equity to increase resilience for all communities.

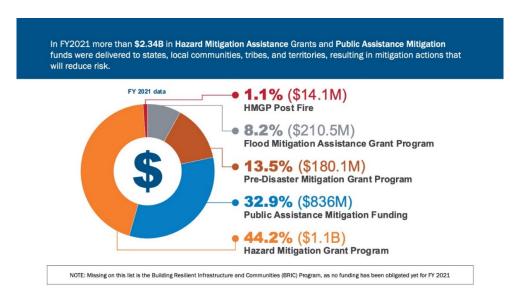


Figure 2. This chart details the amount of funding that was awarded by the Hazard Mitigation Assistance (HMA) Division and Public Assistance (PA) Mitigation in FY 2021, broken down by program.

<sup>&</sup>lt;sup>1</sup> Note that this total does not include the Building Resilient Infrastructure and Communities (BRIC) program, as no funding has been obligated yet for fiscal year 2021.

## Reduce Risk

Hazard Mitigation Assistance (HMA) Impact Statement: FEMA and our partners can anticipate and manage risks from cascading, frequent, and changing conditions.

# 4. Building Resilient Infrastructure and Communities (BRIC)



The <u>Building Resilient Infrastructure and Communities (BRIC)</u> program is the Hazard Mitigation Assistance (HMA) Division's newest grant program and supports states, local communities, tribes, and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards.

BRIC seeks to categorically shift the federal focus from reactive disaster spending toward research-supported, proactive investment in community resilience so when the hurricane, flood, or wildfire comes, communities are better prepared. The BRIC 10-Year Roadmap was developed in 2021 and provides a framework for implementing the BRIC program, continuously enhancing program design to support stakeholders as they manage mitigation programs, projects, and priorities.

The BRIC program was launched in 2020, and FEMA successfully concluded the inaugural BRIC grant cycle in fiscal year (FY) 2021. A total of \$500 million in BRIC funding was made available in FY 2020, and as anticipated, there was an overwhelming interest in the program. FEMA received more than 990 subapplications requesting \$3.6 billion in funding, which continues a long trend in oversubscription among FEMA's annual mitigation grant programs.

FEMA conducted an arduous technical review process to select for further review 22 projects that considered climate resilience, the needs of small and/or disadvantaged communities, and mitigation best practices such as energy microgrids, nature-based solutions, and better building codes. These criteria align closely with the Biden Administration's charge on tackling the climate crisis and promoting equity throughout the country — two areas that are encapsulated within BRIC's guiding principles. FEMA announced the project selections over the summer and is working to finalize awards.

Included within BRIC funding is the tribal set-aside, which totaled \$20 million in FY 2020. Under the tribal set-aside, federally recognized tribes can apply for funding to go toward mitigation projects and capability- and capacity-building activities. In FY 2020, BRIC saw significant participation from 40

tribes who submitted 73 tribal subapplications requesting \$22.9 million in funding. Of these, 38 tribes had applications selected for further review. The total amount of funding available through the tribal set-aside is increased to \$25 million in FY 2021.

BRIC Program Lifetime Highlights			
Number of Subapplications	991		
Number of Structures to be Mitigated	1,521		
Total Subapplication Costs	\$5.50B		
Federal Cost Share	\$3.60B		
Non-Federal Cost Share	\$1.90B		

Figure 3. This table shows topline Building Resilient Infrastructure and Communities (BRIC) data from the first year of the program in fiscal year (FY) 2020, including the number of subapplications received for program funding, the number of structures to be mitigated through the total subapplication costs submitted, and the funding breakdown of federal versus non-federal cost share for requested funding.

In May 2021, President Biden announced that the amount of funding available through the BRIC program would double to \$1 billion for the FY 2021 grant cycle to help meet the ongoing demand for hazard mitigation across the nation and enhance FEMA's efforts to deliver benefits to underserved communities. In addition, the Infrastructure Investment and Jobs Act (IIJA), which was signed in November 2021, provides an additional \$1 billion to the BRIC program over the next five years. FEMA posted the FY 2021 notice of funding opportunity (NOFO) for BRIC in fall 2021 and hosted accompanying technical assistance webinars to help prepare applicants and subapplicants. Throughout the year, FEMA continued its robust stakeholder outreach for the program.

FEMA also evolved the BRIC program to address equity as part of the Biden administration's Justice40 initiative. In FY 2020, FEMA selected its first eight recipients for nonfinancial Direct Technical Assistance under BRIC, which helps disadvantaged communities build capability and capacity by providing holistic planning support. For FY 2021, FEMA is doubling the total number of communities that can benefit from this support—from 10 to 20—to ensure that mitigation funding is accessible for communities who may be less equipped to navigate the grant process.

In addition, the Economically Disadvantaged Rural Communities (EDRC) designation offers an increased federal cost share for communities of 3,000 or fewer individuals identified as being economically disadvantaged, with residents having an average per capita annual income not exceeding 80% of the national per capita income.

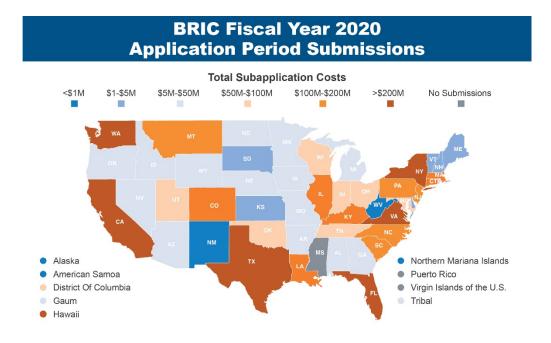


Figure 4. This graph details the total dollar amount of submitted subapplication costs for the Building Resilient Infrastructure and Communities (BRIC) fiscal year (FY) 2020 application period for each state and territory.

#### 5. Flood Mitigation Assistance (FMA)



The <u>Flood Mitigation Assistance (FMA)</u> grant program funds mitigation activities in states and local communities that reduce or eliminate the risk of repetitive flood damage to buildings insured by the National Flood Insurance Program (NFIP), which provides flood insurance to property owners, renters, and businesses to help reduce the socio-economic impact of floods. FEMA began implementing the five-year FMA Strategy in 2021, which aims to reduce program complexity and streamline the application process.

In fiscal year (FY) 2021, FEMA awarded nearly \$185 million in FY 2020 funding for mitigation activities, including community flood mitigation, project scoping, and individual property mitigation projects, that will help build safer, stronger communities by reducing repetitive flood impacts to NFIP-participating areas. This is the second-highest amount of funding obligated in the program's history, after the \$210 million made available in FY 2019. FMA applications requested twice the amount of funding available for the FY 2020 application cycle, which continues the long trend of oversubscription for the FMA program

FMA Grant Program Lifetime Highlights		
Number of Projects	2,992	
Number of Properties	9,119	
Number of Final Properties	8,589	
Federal Share Obligated	\$1,533,740,874	
Average Cost Share Percentage	80%	

Figure 5. This table shows topline Flood Mitigation Assistance (FMA) data since the program's inception, including the number of projects and properties that have received FMA funding, the federal share of funding that has been obligated, and the average cost share percentage per project.

As part of the Biden Administration's Justice40 initiative, FEMA evolved FMA to prioritize equity and make mitigation funding accessible for communities who may lack capacity to meet cost-share requirements. Beginning in FY 2021, FMA will use the Centers for Disease Control and Prevention (CDC) Social Vulnerability Index (SVI) scores as a selection factor to help address the needs of underserved communities.

The FMA program has \$160 million in available funding for the FY 2021 grant cycle. FEMA posted the FY 2021 notice of funding opportunity (NOFO) for FMA in fall 2021 and hosted accompanying technical assistance webinars to help prepare applicants and subapplicants. Beginning in FY 2022, the Infrastructure Investment and Jobs Act will provide \$3.5 billion for FMA over a five-year period, which more than triples the amount previously available for future flood mitigation. This increase in funding presents a tremendous opportunity to double down on the priorities within the FMA Strategy over the next five years.

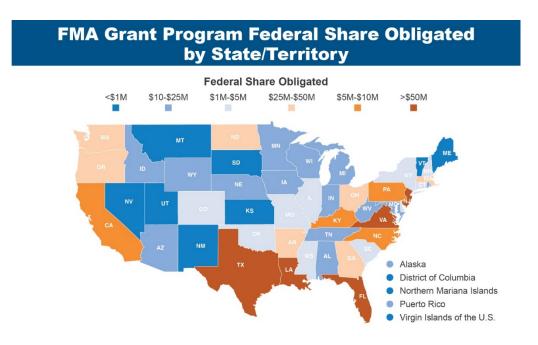


Figure 6. This graph details the federal share of Flood Mitigation Assistance (FMA) funding that has been obligated in since the program's inception for each state and territory.

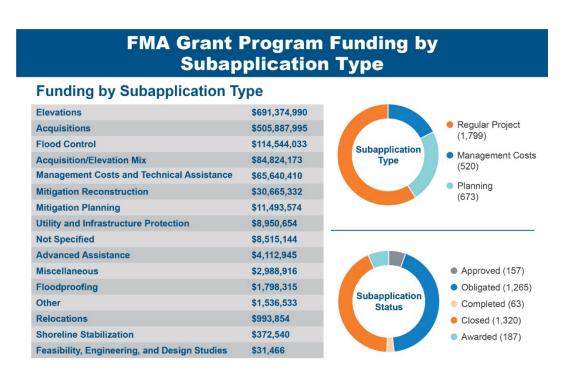


Figure 7. This table details the amount of funding that has been obligated by Flood Mitigation Assistance (FMA) since the program's inception, broken down by subapplication type. The two accompanying charts show the distribution of funds within each subapplication type and the status of each subapplication.

#### 6. Hazard Mitigation Grant Program (HMGP)



The <u>Hazard Mitigation Grant Program (HMGP)</u> assists communities in rebuilding in a better, stronger, and safer way to become more resilient overall following a presidentially declared disaster. To achieve this goal, HMGP funds a wide variety of mitigation projects so state, local, tribal, and territorial (SLTT) governments can rebuild in a way that reduces, or mitigates, future disaster losses in their communities.

In fiscal year (FY) 2021, HMGP implemented the HMGP Forward initiative — the first significant change to HMGP since the program's inception in 1989. HMGP Forward aims to improve the strategic direction of the program with a focus on streamlining accessibility and equitable outcomes, delivering the greatest levels of risk reduction, and reducing program complexity. To meet these goals, HMGP established the Catastrophic Support Section, which provides specialized assistance to support regions and SLTTs that experience catastrophic disasters by facilitating program delivery, building capacity, and fostering long-term resilience.

While continuing to advance HMGP Forward, FEMA awarded 57 new HMGP grants and obligated over \$1.1 billion in grant funding in FY 2021. Simultaneously, FEMA worked with recipients to close out 43 awards and ensured that a backlog of aging HMGP grants was kept below 1% throughout 2021.

HMGP Lifetime Highlights		
Number of Projects	23,011	
Number of Properties	150,732	
Number of Final Properties	126,410	
Federal Share Obligated	\$13,483,425,424	
Average Cost Share Percentage	74%	

Figure 8. This table shows topline HMGP data since the program's inception, including the number of projects and properties that have received HMGP funding, the federal share of funding that has been obligated, and the average cost share percentage per project.

In August 2021, President Biden authorized more than \$3.46 billion in HMGP funding to mitigate natural hazards across the 59 major disaster declarations issued due to COVID-19. HMGP funding will be available to all states, territories, the District of Columbia, and tribes. Prior to this authorization, 21 states and territories did not have HMGP funds available. The HMGP team identified six goals for HMGP for COVID: maximize risk reduction, consider effects of climate change, promote equity, build capacity, reduce complexity, and implement efficiently.

The authorization of HMGP for COVID-19 disaster declarations brings the amount of available HMGP funding in the past five years to \$12 billion, which nearly equals the total amount of funding available in the first 28 years of the program's existence. This historical funding presents a gamechanging opportunity to build a more resilient nation by helping FEMA's partners address the impacts of climate change and the increasing number of natural disasters. It is also helping FEMA to begin implementation of the HMGP Forward direction nationwide.

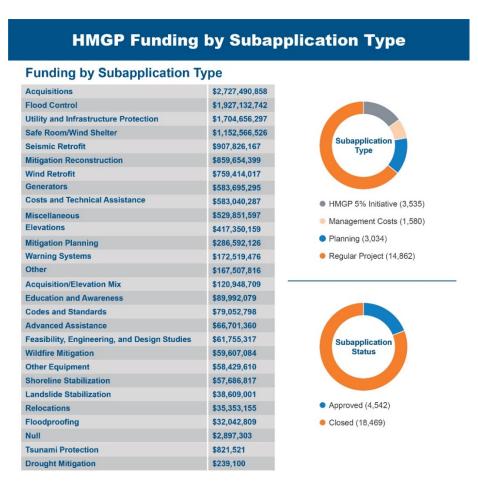


Figure 9. This table details the amount of funding that has been obligated by Hazard Mitigation Grant Program (HMGP) since its inception broken down by subapplication type, including the 5 Percent Initiative, which allows grantees to use up to 5% of HMGP grant funds for projects that are difficult to evaluate using FEMA-approved cost-effectiveness methodologies. The two accompanying charts show the distribution of funds within each subapplication type and the status of each subapplication.

The HMGP team collaborated with numerous stakeholders in 2021, including regional and government partners, to gather feedback on the program. FEMA continues to expand the impact of HMGP through HMGP Forward while providing support for nationwide resilience.

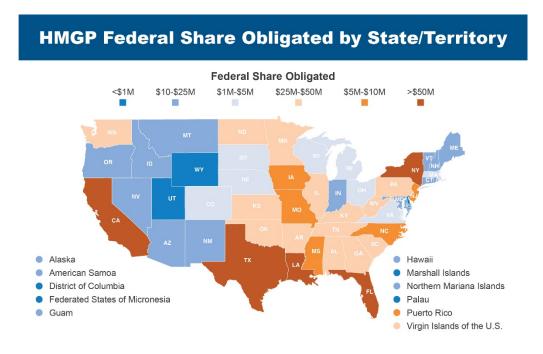


Figure 10. This graph details the federal share of Hazard Mitigation Grant Program (HMGP) funding that has been obligated since the program's inception for each state and territory.

#### 7. Hazard Mitigation Grant Program (HMGP) Post Fire



The <u>Hazard Mitigation Grant Program Post Fire (HMGP Post Fire)</u> provides funds to state, local, tribal, and territorial governments for areas affected by fires that have received assistance under <u>Fire Mitigation Assistance Grant (FMAG)</u> declarations. Before HMGP Post Fire, the program provided funding for wildfires under the FMAG-HMGP program.

HMGP Post Fire Fiscal Year 2021 Grant Program Highlights		
Number of Projects	153	
Number of Properties	62	
Number of Final Properties	5	
Federal Share Obligated	\$8,696.939	
Average Cost Share Percentage	76%	

Figure 11. This table shows topline data for Hazard Mitigation Grant Program (HMGP) Post Fire in fiscal year (FY) 2021, including the number of projects and properties that have received funding, the federal share of funding that has been obligated, and the average cost share percentage per project.

In fiscal year (FY) 2021, FEMA delivered 40 awards to 12 states through the HMGP Post Fire program totaling over \$28 million. This funding is available for mitigation activities that can substantially reduce the risk of future damage, hardship, loss, or suffering from wildfire and its secondary effects such as erosion, slope failure, debris flow, and flooding.

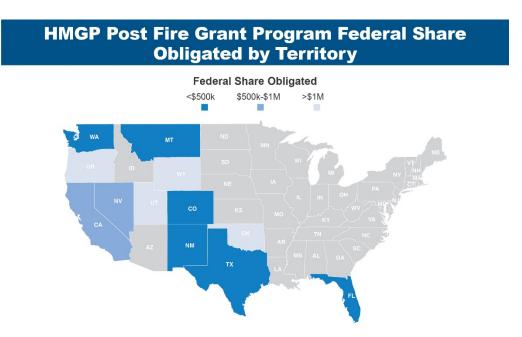


Figure 12. This graph details the federal share of funding for Hazard Mitigation Grant Program (HMGP) Post Fire Programs that has been obligated in fiscal year (FY) 2021.

The HMGP Post Fire program began in FY 2019 after the passage of the Disaster Recovery Reform Act (DRRA) of 2018. There has been a total of 140 FMAG events declared for FYs 2019, 2020, and 2021, totaling nearly \$86 million in available HMGP Post Fire funding. FY 2021 was a busy fire season, though not as severe as FY 2020; there were 40 FMAG declarations and associated HMGP Post Fire awards in FY 2021, compared to 15 in FY 2019 and 85 in FY 2020. There has also been a steady increase in the base grant funding amounts available, which are calculated based on the previous ten-year average of FMAG obligations.

HMGP Post Fire remains focused on reducing complexity for applicants with the creation of fact sheets and job aids, including the <u>DRRA 1204 fact sheet</u> and <u>DRRA 1205 job aid</u>; fillable applications such as the Hazard Mitigation Assistance Wildfire "Plug-and-Play" Application; and streamlining mitigation measures by providing pre-calculated benefits. In addition, FEMA continues to provide support to the regions for HMGP Post Fire by answering program questions, providing program and data analytics, processing funding memos and extension requests, and other support as necessary and appropriate throughout the grant life cycle.

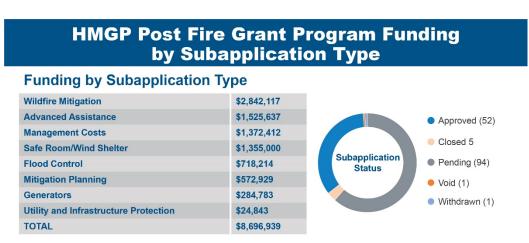


Figure 13. This table details the amount of funding for Hazard Mitigation Grant Program (HMGP)
Post Fire that was obligated in fiscal year (FY) 2021, broken down by subapplication type. The
accompanying chart shows the status of each subapplication.

#### 8. Pre-Disaster Mitigation (PDM)



The <u>Pre-Disaster Mitigation (PDM)</u> grant program was designed to assist state, local, tribal, and territorial governments with reducing overall risk to the populations and structures from future hazard events, while also reducing reliance on federal funding in future disasters. PDM was replaced

by the Building Resilient Infrastructure and Communities (BRIC) program for new funding beginning in fiscal year (FY) 2020.

After 20 years of successfully implementing PDM, FEMA made its final grant selections for FY 2019 funding in 2020. FEMA has now shifted its focus from awarding PDM grants to monitoring projects awarded with FY 2019 funding and prior. To aid in this effort, FEMA has developed monitoring and closeout field guides and checklists for use in the closeout of the PDM awards as well as the implementation of HMGP, FMA, and BRIC to enhance consistency throughout the award lifecycle. Both field guides are intended as background and educational documents for new and experienced grantees to help complete all requirements.

PDM Grant Program Lifetime Highlights		
Number of Projects	4,575	
Number of Properties	7,019	
Number of Final Properties	6,852	
Federal Share Obligated	\$1,353,815,379	
Average Cost Share Percentage	75%	

Figure 14. This table shows topline Pre-Disaster Mitigation (PDM) data since the program's inception, including the number of projects and properties that have received funding, the federal share of funding that has been obligated, and the average cost share percentage per project.

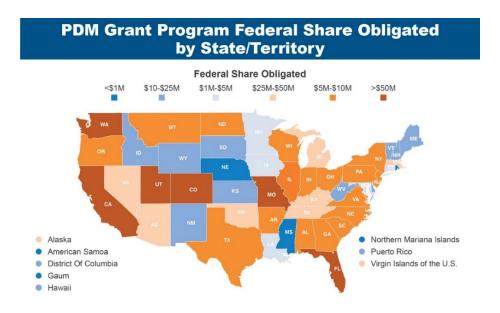


Figure 15. This graph details the federal share of Pre-Disaster Mitigation (PDM) funding that has been obligated since the program's inception for each state and territory.

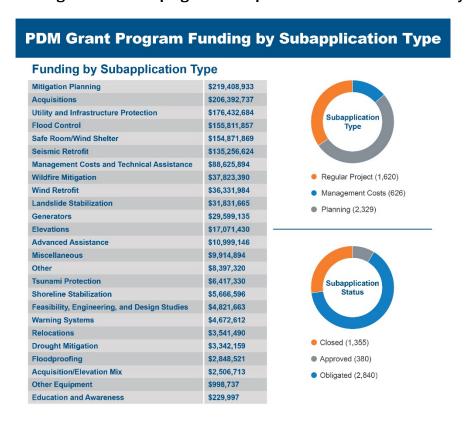


Figure 16. This table details the amount of funding that has been obligated by Pre-Disaster Mitigation (PDM) since its inception, broken down by subapplication type. The two accompanying charts show the distribution of funds within each subapplication type and the status of each subapplication.



#### Hazard Mitigation Project Spotlight: Reducing Wildfire Risk in Ashland, Oregon

With average wildfire sizes increasing nationwide, wildfires in Oregon have been getting larger, more destructive, and more costly to fight.

The City of Ashland, Oregon, is at a high risk for wildfires, as it borders large swaths of forestland that give wildfires opportunity to spread directly into vegetation surrounding homes within the city limits. As such, Ashland has a history of wildfires that have resulted in mandatory evacuations and damaged property. In April 2021, FEMA awarded Ashland \$3 million federal share under the Hazard Mitigation Assistance (HMA) Pre-Disaster Mitigation (PDM) grant program.



Visual of defensible space around a home, extending 100 feet from the structure.

This grant will fund wildfire defensible space, which is the area around a building where vegetation, debris, and other types of combustible fuels have been treated, cleared, or reduced to slow the spread of fire to and from the building, for 1,100 homes and the replacement of 23 highly flammable wood shaker roofs with an ignition-resistant roof material. Defensible space will provide a buffer around a structure that limits the spread of wildfire and to establish an area in which firefighters can safely protect structures through fire suppression activities.

## 9. Public Assistance Mitigation and Community Infrastructure Resilience

The <u>Public Assistance (PA) Mitigation program</u> provides funding to state, local, tribal, and territorial governments for repair and restoration of public facilities, and encourages the protection of damaged facilities from future incidents by providing assistance for hazard mitigation measures.

While PA Mitigation isn't an HMA grant program, it improves long-term resilience and mitigation against future disasters during the recovery process. The HMA Division continues to support PA Mitigation and its investment of \$850 million in funds for mitigation and the obligation of over 4,300 PA permanent work projects with mitigation in 2021. Through PA Mitigation, FEMA provides funding for activities such as replacing drainage structures with larger structures, elevating equipment, dry floodproofing buildings, and constructing floodwalls to retain floodwater that protect infrastructure.

In 2021, HMA's Community Infrastructure Resilience Branch played a large role in FEMA's current and future efforts to reduce risk nationwide with in-depth contributions to address and respond to climate change and has been working to align recovery and mitigation programs with common resilience outcomes under FEMA's 2022-2026 Strategic Plan.

During this time period, FEMA conducted workshops for stakeholders that focused on incorporating climate considerations in alignment with FEMA's Strategic Plan. The program also helped develop the newly released "FEMA Resources for Climate Resilience" and led PA's effort to identify opportunities within the program to both adapt to climate change and reduce greenhouse gas emissions.

## 10. Federal Flood Risk Management Standard (FFRMS) for HMA Programs

In 2021, FEMA partially implemented the <u>Federal Flood Risk Management Standard (FFRMS) for HMA Programs</u>. This policy requires certain structures in <u>Special Flood Hazard Areas</u> to conform to a higher flood elevation standard if they use HMA grant funds. Special Flood Hazard Areas are defined as areas that will be inundated by a 100-year flood event. The higher flood elevation standard will help reduce the impact of future flood disasters on communities, protecting life and property and mitigating for the effects of a changing environment.

The FFRMS interim policy aligns with Executive Order 14030 – Climate-Related Financial Risk to strengthen the state of resilience nationwide and became effective on Aug. 27, 2021. In addition to Building Resilient Infrastructure and Communities (BRIC) and Flood Mitigation Assistance (FMA), the interim policy applies to the Hazard Mitigation Grant Program (HMGP) for any major disaster declared on or after Aug. 27, 2021, and assistance authorized for all 59 COVID-19 disaster declarations.

The FFRMS interim policy also applies to HMGP Post Fire for any Fire Mitigation Assistance Grant (FMAG) declarations issued on or after Aug. 27, 2021. The interim policy requires higher flood elevations for certain actions such as elevation, dry floodproofing, and mitigation reconstruction in the Special Flood Hazard Area.

## †## Promote Equity

Hazard Mitigation Assistance (HMA) Impact Statement: Partners have straightforward and equitable access to HMA programs.

#### 11. HMA Grant Programs Promote Equity

One of the key elements of the Hazard Mitigation Assistance (HMA) Strategic Framework, which sets a future direction for our programs, is promoting equity to ensure that our stakeholders have fair and equal access to our programs. Our goals in this space include reducing barriers to accessing HMA programs in a timely manner, providing focused assistance to underserved communities, and simplifying the mitigation assistance process.

Earlier in 2021, President Biden issued <a href="Executive Order 13985">Executive Order 13985</a> – Advancing Racial Equity and <a href="Support for Underserved Communities Through the Federal Government">Support for Underserved Communities Through the Federal Government</a>. HMA is in the process of completing an equity assessment of our programs that will help advance our efforts to direct program benefits to underserved communities. Some barriers that may prevent underserved communities from applying for hazard mitigation grants include the 25% non-federal cost share requirement and lack of capability when it comes to mitigation planning and project development and management. The findings from the assessment will inform the development of an action plan to meet the equity outcomes addressed in E.O. 13985.

HMA is working to address these barriers and increase capability and capacity of applicants and subapplicants by gathering stakeholder feedback; coordinating with other federal agencies and FEMA programs to identify mitigation activities with more far-reaching impacts; developing more accessible and unique outreach methods to reach underserved communities; and leveraging partnerships to increase access to mitigation planning and grant opportunities, among other methods.

Also in 2021, President Biden launched Justice40 through Executive Order 14008 – Tackling the Climate Crisis at Home and Abroad, which directs federal agencies to develop programs, policies, and activities to address the disproportionate health, environmental, economic, and climate impacts on disadvantaged communities. Justice40 is a government-wide initiative with a goal of delivering 40% of the overall benefits of relevant federal investments to disadvantaged communities.

Currently, there are 21 federal programs that are part of the Justice40 pilot phase, including two within the HMA Division — the Building Resilient Infrastructure and Communities (BRIC) and Flood Mitigation Assistance (FMA) grant programs. As part of the pilot phase, FEMA has developed a draft engagement plan for reaching more disadvantaged communities, methodologies for calculating benefits for both grant programs, and an implementation plan. Two of HMA's biggest priorities for the coming year are identifying where funding is going through comprehensive data analysis and prioritizing outreach and technical assistance to underserved communities.

While FEMA continues to develop plans for the grant program pilots, the agency is already making efforts towards the 40% goal. For fiscal year (FY) 2021, the BRIC program is prioritizing assistance that benefits disadvantaged communities through the Economically Disadvantaged Rural Communities designation, which offers an increased federal cost share for communities of 3,000 or fewer individuals with residents having an average per capita annual income not exceeding 80% of the national per capita income, and by providing non-financial Direct Technical Assistance to help disadvantaged communities build capability and capacity.

Additionally, FMA is incorporating the Centers for Disease Control and Prevention (CDC) Social Vulnerability Index (SVI) as a selection factor for FY 2021 to help address the needs of underserved populations. The CDC SVI uses census tract data to group 15 socioeconomic and demographic indicators into four themes, and communities are scored on a scale of 0 to 1, with 1 being the most vulnerable. FEMA will assign points to projects that benefit area(s) with an overall CDC SVI score of 0.7501 or greater at the census tract scale.



#### Hazard Mitigation Project Spotlight: A Glimmer of Hope for Public Housing in New York City

Ocean Bay Housing Development was constructed in 1958 and houses over 3,600 residents in its 1,389 apartments across 24 residential buildings on the 32-acre campus.

Following Hurricane Sandy, saltwater storm surge and sewer backup flooded the entire site to a depth of roughly 10 feet, which breached the boiler plant of all but one building, submerging and damaging them beyond repair. A storm-related power outage lasted for three weeks and contributed to flood stagnation in shallow areas and mold growth, making the homes uninhabitable.



An aerial image of the Ocean Bay Housing Development in New York City. Image courtesy of RDC Development

To better withstand future disasters, Ocean Bay received the third largest solar panel installation at an affordable housing development in New York, a secure flood wall around the entire 32-acre site, water retention swales, stand-alone electric service buildings built above the flood zone, and the conversion of one central boiler steam system to 24 individual hydronic boilers on the roof of each building to make them more resilient to flooding. With \$560 million in FEMA funding, the redevelopment was completed in just two years and provided multiple residential improvements to buildings, site systems, and grounds, and a solar array to provide a source of standby power during extended outages.

# **12.** Determining the Benefits of a Mitigation Project Compared to its Cost

Benefit-Cost Analysis (BCA) is a method that determines the future risk reduction benefits of a hazard mitigation project and compares those benefits to its costs. Pre-calculating benefits is a process to quickly determine if a mitigation project is cost effective, which in turn expedites grant applications and enables communities to protect themselves from disasters sooner. In 2021, Hazard Mitigation Assistance (HMA) Division's BCA Toolkit, which can be used to quantify the benefits of a project and compare them to its cost, received multiple updates to help grant applicants and subapplicants more quickly and easily assess the Benefit-Cost Ratio (BCR) of their projects. One new functionality of note is the ability to import and process multiple structures at a time within the BCA Toolkit. This function will greatly simplify the BCA process for large projects that mitigate risk to hundreds of thousands of structures, such as large flood control project or utility infrastructure mitigation. These efforts reduce the burden on grant applicants and subapplicants when demonstrating cost-effectiveness of their mitigation projects and helps FEMA achieve its strategic goal of reducing complexity.

Based on the premise that investing in hazard risk mitigation will reduce spending on recovery and response, HMA recognizes that equity issues are important in helping communities' mitigation efforts. FEMA has engaged the Homeland Security Operational Analysis Center, a federally funded research and development center operated by the RAND Corporation for the U.S. Department of Homeland Security to conduct a study that will analyze our current process and looking at the cost effectiveness requirement and how we can best achieve it, with access and equity as a priority. This work will explore potential changes that might equitably expand access to these programs while still meeting cost effectiveness requirements.

FEMA also released an update to the acquisition and elevation pre-calculated benefits for the first time since 2013. These updated values will help address the increasing costs of mitigation and rebuilding after disasters. The updated value for elevation projects could also help communities comply with the new Federal Flood Risk Management Standard (FFRMS), which requires non-critical structures to be elevated 2 feet above the Base Flood Elevation, by providing additional benefits to offset increased costs.

In addition, the BCA program released a new pre-calculated benefit for hospital generator projects based on the community type in which the hospital is located. These values can be used by all hospitals that have an emergency department. This is the first new pre-calculated benefit that FEMA has released since the non-residential hurricane wind retrofit value in 2018.

#### 13. Ecosystem Service Benefits Policy

Ecosystem services support risk reduction through erosion control, air quality, recreation space, and water filtration. In September 2020, FEMA released a new ecosystem service benefits policy — Ecosystem Service Benefits in Benefit-Cost Analysis (BCA) for FEMA's Mitigation Program Policy (FEMA Policy 108-024-02) — that removes the 0.75 threshold required for mitigation projects' Benefit Cost Ratio (BCR).

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Previously, mitigation projects had to reach a BCR of 0.75 or greater before ecosystem service benefits could be included in the BCA. The policy update is responsive to stakeholder feedback — both from the public and private sectors — and allows communities to have more opportunities to include nature-based solutions in risk-based mitigation projections. The new policy also aligns with BCA Guidance for the federal government and reduces the complexity of FEMA's HMA programs.



Hazard Mitigation Assistance (HMA) Impact Statement: Communities reduce the risk of loss of life and property by using all available programs, tools, and resources.

#### 14. Non-Financial Direct Technical Assistance (DTA)

FEMA offers non-financial <u>Direct Technical Assistance (DTA)</u> to provide holistic planning support to communities wanting to apply for the Building Resilient Infrastructure and Communities (BRIC) grant program. FEMA offers up to 36 months of support for project or application-specific needs, along with community-wide resilience needs. DTA can help communities with things like identifying mitigation projects, building capability and capacity, forming collaborative partnerships, and applying for the BRIC grant program.

In 2021, FEMA provided DTA support to eight communities but is expanding its support to up to 20 communities in 2022.

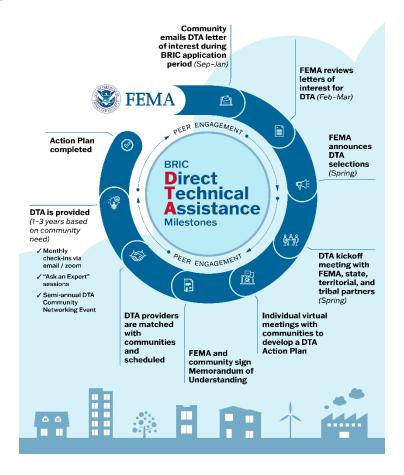


Chart shows the BRIC Direct Technical Assistance (DTA) milestones.

#### 15. FEMA.gov Website Enhancement

FEMA's Hazard Mitigation Assistance (HMA) Division has redesigned its programs' web pages so users can better find the information they need where and when they need it. Helpful web pages to guide customers "before you apply," "when you apply," and "after you apply" are making it easier to understand all of our programs and the application process. The language has been simplified and each program's page is laid out similarly, to provide uniformity.

Newly designed resource pages now make it faster than ever to search for keywords or phrases and locate helpful documents. Throughout every phase of the application process, our stakeholders will find the relevant information they need easily accessible on our site.

#### 16. Updated and Accessible Program Support Materials

The HMA Division develops and maintains a robust library of educational materials to ensure stakeholders are proficient in all HMA grant programs and changes to policies and the programs. Featured content in 2021 includes:

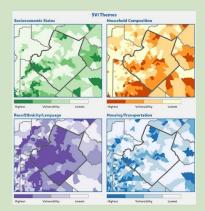
- Strengthening Medical Lifelines with Hazard Mitigation: Funding from the Hazard Mitigation Grant Program (HMGP) may be used broadly by state, local, tribal, and territorial (SLTT) governments for health care, medical, public health, and other critical facilities. This fact sheet identifies flexibilities SLTTs should consider for projects that can be implemented to enhance resilience to these important facilities.
- <u>Building Resilient Infrastructure and Communities (BRIC) Program Support Materials</u>: Resources
  that provide important information on various activities under the BRIC grant program to support
  building codes, partnerships, project scoping, nature-based solutions, and more.
- <u>The Mitigation Action Portfolio</u>: A resource to introduce stakeholders to the BRIC grant program and the array of eligible hazard mitigation activities that can benefit stakeholders.
- Flood Mitigation Assistance (FMA) Program Support Materials: Materials that provide important
  information on various activities under the grant program to support project scoping, community
  flood mitigation projects, geospatial file requirements, and more.



#### Hazard Mitigation Project Spotlight: Improving Outreach to Vulnerable Areas

The Centers for Disease Control and Prevention's <u>Social Vulnerability Index</u> (SVI) is a tool used to identify socially vulnerable communities throughout the country. Based on data from 15 demographic and socioeconomic indicators, the tool creates an overall vulnerability score, ranging from 0 to 1, with zero being the least vulnerable and 1 being the most vulnerable.

This social vulnerability score measures a community's ability to survive and thrive when confronted by external stressors on human health, such as disaster or disease outbreak. Reducing social vulnerability can decrease human suffering and economic loss when faced with these risks. This became of particular interest to two of FEMA's Hazard Mitigation Officers – Andy Davis and Michael Sawyer.



Maps show the range of vulnerability in Gwinnett County, Georgia for the four themes.

While supporting the COVID-19 response, Andy and Michael saw the tool being used to intentionally include socially vulnerable populations in FEMA supported COVID-19 vaccine distribution. The officers found that states could be successful in using the SVI by identifying where projects are being funded and the vulnerability in those areas. For example, the SVI could be considered by the state when looking at pre-applications, and could help identify that there are more projects submitted from low vulnerability areas, suggesting a need to improve outreach.

FEMA staff have used the SVI to identify SVI scores of communities that have been prioritized in project applications helping the states of Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin set priorities and reach regions that are vulnerable and at high risk.

#### 17. Webinars

The Hazard Mitigation Assistance (HMA) Division hosts a number of webinars to keep stakeholders engaged and informed.

- Climate Change, Future Conditions, and Nature-based Solutions This webinar provides an
  overview and examples of climate change, future conditions, and how nature-based solutions
  can help build community resilience against these issues. View the webinar to learn more.
- Building Resilient Infrastructure and Communities (BRIC) and Flood Mitigation Assistance (FMA) Fiscal Year (FY) 2020 Data and Trends This webinar provides an overview and analysis of data trends regarding selections of subapplications for the \$700 million available in FY 2020 for two of FEMA's mitigation grant programs. View the webinar to learn more.
- Notice of Funding Opportunity Series Hosted in August and September, these webinars provide applicants and subapplicants an overview of the FMA and BRIC grant programs, details about the agency's funding priorities, and common pre-disaster hazard mitigation grant application errors and how to avoid them in FMA and BRIC applications. View the webinar to learn more.
- Where Equity Fits into the BRIC/FMA Program Design and Community Resilience This webinar highlights how the BRIC and FMA Programs incorporate equity into program design, and how the programs can be used to support community resilience, especially for disadvantaged and tribal communities. View the webinar to learn more.
- Office Hours Over the course of four engagements in the fall of 2021, grant applicants and subapplicants had an opportunity to ask FEMA subject matter experts their technical questions to support the successful submission of applications for FY 2021 BRIC and FMA grant cycles.
- Severe Repetitive Loss/Repetitive Loss Mitigation Priorities This webinar focuses on strategies to eliminate or reduce the damage to residential property and the disruption to life caused by repeated flooding and other hazards, and how FEMA's FMA Program can be used to support these types of projects. <u>View</u> the webinar to learn more.
- Federal Agency Roundtable and Partnerships This webinar includes a federal panel discussion on the importance of partnerships for FEMA's grant programs. <u>View</u> the webinar to learn more.

#### 18. Hazard Mitigation Assistance (HMA) Training

The Hazard Mitigation Assistance (HMA) Division supports the training needs of internal and external partners throughout their learning journey by strengthening their knowledge, skills, and capabilities of grant application development, hazard mitigation planning, and benefit-cost analysis. In 2021, the HMA Division developed a multi-phased Onboarding and Learning Implementation to support collaboration with state, local, tribal, and territorial partners; create professional networks committed

to mitigation; and improve access to training resources to foster an environment of learning and innovation.

The HMA Division identified interests in Building Resilient Infrastructure and Communities, Hazard Mitigation Assistance grants, and Grant Application Development and tailored training to incorporate additional deliveries and more varied formats of courses on those topics. In 2021, 165 trainings were delivered compared to 92 trainings in 2020. An almost entirely virtual environment allowed the trainings to reach a broader audience with over 3,400 internal and external participants completing over 1,000 hours of training. A better understanding of training needs and the expansion of virtual courses has doubled HMA training delivery since 2018.

#### 19. FEMA Grants Outcomes (FEMA GO)

FEMA Grants Outcomes (FEMA GO) continues to simplify the grants management lifecycle process through a user-centered, business-driven approach founded on active engagement with grant stakeholders using training and outreach. The grants management system is being used for FEMA's Assistance to Firefighters Grant Program, Staffing for Adequate Fire and Emergency Response (SAFER), Building Resilient Infrastructure and Communities (BRIC) and Flood Mitigation Assistance (FMA) grant programs.

The FEMA GO development team used what had already been built for the Assistance to Firefighters Grant Program to very quickly configure the functionality required for the BRIC and FMA grant programs. Since these mitigation grant programs pass funding through to subrecipients who manage the projects funded by the grant, functionality was added to the system to provide visibility on grant projects at a more granular level.

For the FY 2020 BRIC and FMA funding opportunities, 123 applications and 1,227 subapplications were submitted in FEMA GO. 18 application awards and 16 subapplication awards have been made from FEMA GO. For fiscal year 2021, a total of \$160 million in funding was made available for the FMA program. FEMA received 194 subapplications from 22 states, totaling \$649 million and \$534 million in federal share requested. For fiscal year 2021, a total of \$1 billion in funding was made available for the BRIC program. FEMA received 782 subapplications from all 50 states, 31 tribes and territories totaling \$6.44 million and \$4.16 billion in federal share requested. For more information, visit the FEMA GO webpage.

FEMA is continuously gathering business requirements across all grant programs to feed system development efforts to meet full operational capability. Currently, the development of remaining post-award functionality, including the ability to close out grants, is a top priority. FEMA is completing the design of pre-award consultative project development functions needed for Hazard Mitigation disaster grants to comply with Stafford Act requirements.

FEMA continues to offer training opportunities to stakeholders. FEMA's Grant Programs Directorate (GPD) expanded its training capacity by onboarding two additional trainers and conducted over 25

customized training webinars with FEMA Regional Hazard Mitigation Assistance (HMA) staff, including Grant Management Specialists and Assistance Officers.

FEMA continues to conduct outreach with stakeholders. GPD hosted five FEMA GO Quarterly Status Briefings, reaching more than 3,000 individuals including BRIC and FMA stakeholders. Additionally, GPD completed three FEMA GO usability and design surveys to solicit feedback from all FEMA GO stakeholders registered in FEMA GO, including BRIC and FMA applicants and subapplicants. The results of these surveys and other user engagements are a key part of the User Experience (UX) design approach that FEMA GO employs in its system design, testing and delivery. UX design helps ensure that we are achieving Agency and program strategic objectives to reduce complexity, simplify grant management processes and make FEMA programs more accessible to applicants.

FEMA GO is being developed around an incremental, iterative approach to delivering high-quality software functionality with frequent deliveries to ensure value throughout the process for its stakeholders. A high value is placed on people working collaboratively with the ability to respond to change based on user feedback. FEMA will identify enhancements through user feedback sessions, consulting with the grant programs on best practices and solutions throughout the development process. Stakeholders are involved in every stage of development, from the planning and design phase through validating functionally.

FEMA facilitates multiple working groups, user research interviews, and outreach sessions to keep stakeholders informed about the development of FEMA GO. For more information or to get involved with the planning efforts, please email <a href="mailto:FEMAGO@fema.dhs.gov">FEMAGO@fema.dhs.gov</a>.

## **Foster Connection**

Hazard Mitigation Assistance (HMA) Impact Statement: HMA brings people and communities together to help them consider risk and mitigation in all investment decisions.

#### 20. External Stakeholder Working Group (ESWG)



The External Stakeholder Working Group (ESWG) held virtual meetings during 2021.

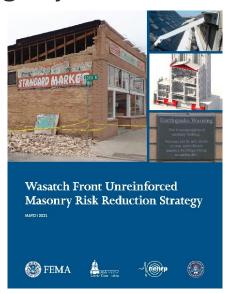
The External Stakeholder Working Group (ESWG) is comprised of 12 hazard mitigation professionals from across the U.S. who represent state, tribal, local, and FEMA Regions. FEMA's Hazard Mitigation Assistance (HMA) Division collaborates directly with these diverse stakeholders and together, the partnership helps promote investments in risk reduction.

Each year, the ESWG engages in deep dive thinking and problem solving through workstreams. The 2021 workstreams included:

- Benefit-Cost Analysis (BCA) and Equity: The BCA and Equity workstream partnered with HMA to examine FEMA's BCA methodology through an equity lens. Over the course of the year, the workstream members brainstormed obstacles and potential solutions related to equity and BCA. A paper was developed with a list of recommendations, from most impactful to least impactful, and solutions that the ESWG as a whole believes FEMA should pursue. These recommendations are being reviewed and considered for improvement to the BCA tool, trainings and resources, and technical assistance.
- Public Assistance (PA) Mitigation: The PA Mitigation Workstream's goals were to (1) increase the number of state emergency management agency websites with accurate and informative information on Public Assistance Mitigation and (2) identify communication material that could be improved to increase the usage of Public Assistance Mitigation funding. The workstream helped develop Public Assistance Mitigation language that is being used to update state emergency management agencies websites. Through successful outreach, FEMA has been able

to get multiple states to update their information or develop an approach to update their website. Additionally, the workstream provided vital feedback on communication resources to ensure stakeholders understand how and where mitigation is located in the PA process of recovery.

#### 21. Federal Interagency Coordination



#### Image shows the Wasatch Front Unreinforced Masonry Risk Reduction Strategy cover.

The Hazard Mitigation Assistance (HMA) Division coordinates with other federal agencies through the Mitigation Framework Leadership Group (MitFLG)'s National Mitigation Investment Strategy Implementation Team. The Implementation Team serves as a catalyst to identify and promote investments in mitigation by collaborating across multiple levels of government and seeking input from partner organizations in order to develop tools and resources to increase whole community resilience and measure success.

In 2021, FEMA partnered with Utah to develop and publish the <u>Wasatch Front Unreinforced Masonry Risk Reduction Strategy</u>, which provides guidance to Utah communities on how to identify risk and take steps to address it. This helped create awareness of 140,000+ unreinforced masonry (URM) buildings along the Wasatch Front with the potential for saving over 2,700 lives. To ensure this capability building could be shared with other communities, the Implementation Team also developed a companion document that illustrates the benefits of partnerships to increase community resilience through identifying best practices from the Wasatch Front Pilot Project for other communities. The URM Strategy Best Practice and Transferability Report can be utilized by other entities who want to replicate mitigation best practices to reduce risks.

#### 22. External Stakeholder Coordination

Our partnerships are important to the Hazard Mitigation Assistance (HMA) Division's continued successes, and in 2021 we maintained a robust outreach schedule to message the importance of our programs. We pivoted to a virtual forum for the 2021 Hazard Mitigation Partners Workshop, which was one of the agency's largest-ever, delivered 15 webinars during the Building Resilient Infrastructure and Communities and Flood Mitigation Assistance Summer Engagement Series, and attended over 100 speaking engagements. Partners for 2021 webinars included The Nature Conservancy, the National Oceanic and Atmospheric Administration (NOAA), the RAND Corporation, the Commonwealth of Virginia, and the Central Shenandoah Planning District Commission. The HMA Division continues to coordinate with a variety of external stakeholders to increase whole community resilience.

### **Looking Ahead**

The past year brought change to the Hazard Mitigation Assistance (HMA) Division and billions of dollars in funding through new Executive Orders, initiatives, and the Infrastructure Investment and Jobs Act (IIJA). We remain flexible and ready to adapt despite the challenges of climate change, increasing disaster risks, and a persistent pandemic.

With this huge opportunity, we look forward to improving our programs and generating transformational change in mitigation. HMA will be exploring how to increase the number of historically- and currently-underserved communities served, catalyze mitigation investment across the public and private sector, and build sustainable and longer-term capability. By exploring how to align HMA grants more closely with the unique needs of each community, HMA aims to shift from a program-centric to a more community-centric program delivery in the coming years.

#### 23. Hazard Mitigation Assistance Guidance

The Hazard Mitigation Assistance (HMA) Division is currently working to update the <u>2015 HMA</u> <u>Guidance</u>. The purpose of the update is to incorporate existing policies published after the release of the 2015 HMA Guidance and to reflect various other changes, including the new Building Resilient Infrastructure and Communities (BRIC) Program.

Additionally, based on stakeholder feedback that FEMA collected, a guiding principle of the HMA Guidance update is that the end-product should reduce complexity for the user and make requirements clearer in order to streamline applying for and administering the HMA programs. The HMA Division anticipates that there will be an opportunity for stakeholders to review and add input before the final document is released. We anticipate the updated HMA Guidance will be finalized in late 2022.

# 24. Safeguarding Tomorrow through Ongoing Risk Mitigation (STORM) Act

The Safeguarding Tomorrow through Ongoing Risk Mitigation (STORM) Act became law on Jan. 1, 2021. It amends the Robert T. Stafford Act and authorizes FEMA to provide capitalization grants to states or eligible Indian tribal governments for the establishment of hazard mitigation revolving loan funds to finance projects that reduce risks from natural hazards and disasters. The Infrastructure Investment and Jobs Act became law on Nov. 15, 2021, fully funding the STORM Act and providing \$500 million, or \$100 million per year over five years.

FEMA will provide capitalization grants to states and Indian tribal governments to administer revolving loan funds for mitigation projects to increase resilience and reduce risk of harm, multi-hazard, and regional impact of hazards. In addition, activities for zoning and land-use planning changes and building code enforcement are included.

The STORM Act is the first hazard mitigation assistance program to provide capitalization grants for revolving loan funds. FEMA is exploring program design for the STORM Act and looks forward to the opportunity for a new source of mitigation funding to reduce risk and increase community resilience.

#### 25. Flood Mitigation Assistance Disaster Initiative

FEMA strives to streamline the delivery of mitigation grant programs to provide timely access to funding so that all communities can be flood resilient. In 2021, the Hazard Mitigation Assistance (HMA) Division began exploring ways to better align Flood Mitigation Assistance (FMA) grant funding with the disaster survivor experience.

FEMA wants to recognize the growing flood hazards associated with climate change and the need for flood hazard risk mitigation activities that promote climate adaptation and resilience with respect to flooding. The FMA grant program provides funding to states, local communities, federally recognized tribes and territories that can be used for projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the National Flood Insurance Program. This is especially important for buildings that are repetitively flood-damaged or are declared substantially damaged and may be required to be brought into compliance with the local community's flood regulations. FEMA has spent a number of months pinpointing the current program delivery constraints and developing a way to deliver FMA funding faster. This is an extraordinary undertaking and will be a key component in providing mitigation opportunities to flood disaster survivors as they are considering repairs. FEMA anticipates launching this initiative in calendar year 2022.