National Advisory Council
Report to the FEMA Administrator

December 2021
Table of Contents

LETTER FROM THE NAC CHAIR ...................................................................................................................... 4
FOREWORD ................................................................................................................................................... 5

Equity Subcommittee of the 2021 National Advisory Council .............................................................................. 6

EQUITABLE FUNDING ........................................................................................................................................... 6
  01 – Core Values and Equity .................................................................................................................. 7

EQUITABLE MITIGATION FUNDING SUPPORT .......................................................................................... 8
  02 – Increased Hazard Mitigation Assistance to Local, Tribal, and Territorial Communities ............... 9

CONSIDER DECLARATION CHANGES ....................................................................................................... 10
  03 – Expand the Declaration Criteria ......................................................................................................... 10
  04 – Tiered Approach to Individual Assistance .......................................................................................... 10

REDUCE APPLICATION OBSTACLES ......................................................................................................... 11
  05 – Alternative Proof of Home Ownership ............................................................................................ 12

Expedite Disaster Assistance Subcommittee of the 2021 National Advisory Council ........................................................... 13

STREAMLINE THE PUBLIC ASSISTANCE PROGRAM ................................................................................. 13
  06 – Decrease Public Assistance Bureaucracy .................................................................................... 15
  07 – State Led Approach ..................................................................................................................... 16
  08 – “Getting to Yes” in Public Assistance .......................................................................................... 16

REDUCE PUBLIC ASSISTANCE INCONSISTENCIES .................................................................................... 17
  09 – Consistency in Public Assistance Delivery ................................................................................... 18

EQUITABLE DIGITAL MODERNIZATION ................................................................................................... 19
  10 – Equitable Access to Modern Systems ............................................................................................ 20
  11 – Single Secure Platform for Grant Lifecycle and Creation of Resilient Open Architecture for Digital Data .................................................................................................................. 20
  12 – Application Programming Interface (API) for Systems Integration ............................................. 22

MITIGATION & RESILIENCE ..................................................................................................................... 23
  13 – Greater Mitigation Program Flexibility ....................................................................................... 24
  14 – Reduce the Benefit-Cost Analysis Discount Rate ........................................................................... 25

Vision 2045 Subcommittee of the 2021 National Advisory Council ........................................................... 27

STRENGTHEN DISASTER SUPPLY CHAIN CAPABILITIES ........................................................................ 27
  15 – Adequately resource Logistics Distribution Hubs ........................................................................... 27

DEVELOP COMMON RISK FRAMEWORK FOR COMMON OPERATING PICTURE ............................... 28
16 – Develop a National Risk Management Framework ................................................................. 29
17 – Link the National Risk Index to the proposed National Risk Management Framework .......... 29
18 – Harmonize Risk and Resilience frameworks ........................................................................... 30
19 – Review and address insurance redlining.................................................................................. 30

BUILD HUMAN CAPITAL AND CAPACITY ....................................................................................... 30
20 – Create Professional Pathways within Existing FEMA Workforce ........................................... 32
21 – Improve Pathways and Pipelines for Future Emergency Managers .......................................... 32

ACKNOWLEDGEMENTS .................................................................................................................. 34
LETTER FROM THE NAC CHAIR

It is with great honor that I present this report from the National Advisory Council (NAC) to FEMA Administrator Deanne Criswell. The recommendations delivered in this report represent overall agreement among the NAC membership relating to some of the pivotal problems for emergency managers around the nation.

Over the past year, emergency managers continued responding to COVID-19, battled scorching wildfires in the West, handled crushing flooding in the East, tackled severe storms in the Midwest, and braced for the devastating Hurricanes that made landfall. As of October 8, the United States experienced 18 disasters that exceeded one billion dollars in damages in 2021.¹ Despite these hurdles, emergency management professionals who make up the NAC continued the important work of identifying triumphs and shortfalls in preparedness, protection, response, recovery, and mitigation for disasters.

The NAC strives for equitable, coordinated, and outcome-driven solutions for the emergency management field. Through important discussions, the report compiled by this diverse body confronts the critical issues facing the field and represents the NAC’s final consensus on them.

As NAC chair, I’m pleased to share these recommendations that reflect the latest landscape of emergency management.

Sincerely,

W. Nim Kidd, MPA, CEM
Chair
FEMA National Advisory Council

¹ “In 2021 (as of October 8), there have been 18 weather/climate disaster events with losses exceeding $1 billion each to affect the United States.” Billion-Dollar Weather and Climate Disasters | National Centers for Environmental Information (NCEI) (noaa.gov)
The U.S. continues to grapple with the harrowing effects of the COVID-19 pandemic which has brought unprecedented challenges to all levels of government across the entire country. The 2020 and 2021 Atlantic hurricane seasons have demonstrated the continuing impacts of climate change with more frequent and more severe storms, bringing more frequent major hurricane landfalls across the Gulf and Southeast regions of the country. Additionally, we see increased effects of these storms as they move slowly across the country, and not only in the Southeast but even into the Northeast. As the severe drought continues across the entire West, this year brought another unprecedented wildfire season across the western states. Throughout all these disasters, we have seen the professional men and women of FEMA providing immediate emergency response assistance to impacted communities, while marshaling federal resources and funding for medium- to long-term recovery. We recognize FEMA as a lead federal partner at the forefront of helping impacted communities across the entire country this year, as in every year.

The NAC wants FEMA leadership, and every employee of the agency, to know the members of the NAC recognize what a challenging two, or even three, years it has been for FEMA as COVID-19 and high levels of other major disasters have impacted states and communities across the country. The NAC wants FEMA leadership to know that the NAC recognizes the heroic efforts of FEMA staff and management across the country, in every region and state, working hard to help our country respond to and recover from these events.

We offer the recommendations included in this report, in alignment with statutory authorities and specific charges provided to the NAC by the FEMA administrator, to assist FEMA in its efforts to enhance and strengthen FEMA’s capacity to aid all states, territories, tribes and local governments in responding to and recovering from disasters. We also recognize that FEMA has in recent years continued the path of innovation and improvement: Consolidated Resource Centers, the new Public Assistance Program delivery model, the Building Resilient Infrastructure and Communities Program, to name a few. The NAC submits these recommendations in support of FEMA in its mission to continually improve.
Equity Subcommittee of the 2021 National Advisory Council

EQUITABLE FUNDING

Problem:

Programs are targeted to those suffering disaster impacts, but often fail to deliver assistance to those with the greatest need.

Current State:

FEMA provides funding based on damages. FEMA spends most programmatic dollars on disaster recovery in the continuum of the disaster cycle. Many studies have shown that funds, for a multitude of reasons ranging from inflexible documentation requirements, to lack of access to programs, and distrust of government, are not distributed to individuals that most need assistance. This has contributed to the inequitable distribution of Individual Assistance (IA). Inequities that exist prior to a disaster cannot be expected to be fixed by the programs that FEMA administers, but individuals who start with less personal property, disposable income, and other resources pre-disaster are affected disproportionately and actually lose a higher percentage of their total resources post-disaster than those who have more resources. As an outcome, when awards are determined, those that started with less receive disproportionately less. This contributes to the continued “wealth gap” in the United States. This is just one of the ways that inequity continues to be propagated within the FEMA programs.

Considerable public attention has been brought to bear, as organizations and news outlets have asserted that FEMA assistance disproportionately benefits higher income households when compared with lower income households.

Desired State:

Equity will not be defined or measured in any single way but will be considered in all that FEMA does from hiring practices, to grant awards and to individual assistance. It is important that different equity metrics as well as different methodologies of study be established to assure equitable practices throughout FEMA.

FEMA will have conducted a review of existing and emerging programs to examine their alignment with the agency’s core values and whether they are deliverable in an equitable manner based upon the Office of Management and Budget (OMB) definition of equity, within 12 months. A report will have been produced for the FEMA administrator that includes any necessary recommendations to modify existing

---


programs, workforce changes, training updates, or the development of new programs. The report should also provide recommendations for the development of lead and lag metrics, which can subsequently be refined by individual program offices.

FEMA will be able to provide objective evidence that its training, programs, and activities are being delivered in a manner that is equitable, consistent, and aligned with its core values. The use of specific and measurable targets or standards can be useful tools tracking performance and impact. Effective metrics can provide validation of equitable outcomes, identify disparities impacting marginalized and historically underserved communities, and identify unintended consequences impacting these communities. A process that cannot be measured cannot be effectively assessed or repeated on a consistent basis.

To ensure that metrics are aligned with the goals and do not become the goals themselves, it is expected that metrics will be regularly evaluated to ensure they continue to reflect an alignment of FEMA’s core values with the OMB definition of equity, thus providing a measurable path to achieving desired goals. The agency’s ability to fully embrace equity, and the complex and nuanced ways of measuring its success with metrics and indicators, will evolve. It is therefore important to ensure that the use of metrics does not result in an inflexible process (when needed), which could negatively affect the ability to achieve the mission of helping people, in alignment with the core values.

It is also desirable for appropriate equity-driven lead and lag metrics to be tracked throughout the mitigation, response, and recovery processes. Use of carefully developed metrics can ensure that the needs and considerations of different communities are met, as well as the early detection of unintended consequences, such as harmful economic or social impacts on survivor groups both within and outside of marginalized and historically underserved communities. For example, lead metrics might include the number of staff assigned to support a community, or the number of different methods of communication (or languages) used to reach different marginalized communities. Lag metrics might include the percentage of people within a community that had been left with an uninhabitable home after a disaster who were transitioned out of sheltering into stable accommodations.

FEMA training programs will incorporate elements that include diversity and inclusion, implicit bias training, and cultural competency. Educational delivery should be creative, nimble, unique, and varied. Examples include daily one-minute audiocasts, daily reminder text or email with tips, and short-duration just-in-time video training demonstrating skills for field personnel that are targeted at the communities social and cultural groups with whom they will be interacting.

Recommended Solutions:

01 – Core Values and Equity

**Recommendation 2021-01:** The administrator should ensure the agency achieves the equitable execution of its core values: compassion, fairness, integrity, and respect. The process of achieving equity should be dynamic, fluid and tied to specific process and outcome metrics. To ensure FEMA’s core values are being executed equitably, an assessment should include an accounting of inclusivity, trust-building capability, receptive listening, justice, and impartiality. Equity in core values should be all-encompassing and include initiatives in workforce management, execution of existing programs, and the implementation and design of new programs.
When examining the equitable execution of its core values, FEMA should include the insights and perspectives of a diverse group of individuals, including economists, government, private sector, academia, and most importantly historically marginalized and under-represented individuals, as they are the experts in understanding and conveying their needs. Equitable execution of FEMA’s core values should be incorporated into essential training for new and current FEMA staff, especially those on disaster deployments and in the development of emergency management training programs for state and local jurisdictions. This effort can also serve to support the development of lead and lag metrics (also known as process and outcome metrics) for measuring the effectiveness of the execution of the equity standard across FEMA operations.

**Anticipated Impact:**

- All communities, whether urban, rural, tribal, or territorial, will be better served and have increased resilience to the impact of disasters.
- Improved sensitivity and awareness within FEMA and in the emergency management field as to the importance of integrating the core values related to equity in all aspects of emergency management.
- FEMA will fully understand the extent to which its programs are equitable and will have established a road map to alleviate disparities experienced by marginalized and historically underserved communities.
- Employee performance will be improved.
- Public perception of the equitable delivery of FEMA’s programs and services will be improved.

**EQUITABLE MITIGATION FUNDING SUPPORT**

**Current State:**

When post-disaster recovery assistance is prioritized and targeted towards marginalized and historically underserved communities, the opportunity to incorporate mitigation projects and strategies presents itself only as a resource gap, both in terms of funding available and personnel. In particular, tribal governments often find that they are not provided with adequate resources to identify and address hazards that could be mitigated with FEMA support. As of November 2021, FEMA has started to examine alternative ways for underserved communities to provide the financial match required to receive mitigation funds, so this recommendation focuses on the need for additional capacity.

Many underserved and marginalized communities lack the government infrastructure – programs, policy, and administration – to champion disaster preparedness and hazard mitigation. The result of the resource gap at the local, territorial, and tribal level often means that communities in the greatest need of mitigation and resilience strategies do not submit pre-disaster – or post-disaster – mitigation proposals, which continues the cycle of high risk and exacerbated destruction after a disaster.

Because states manage the request and disbursement of mitigation funds, tribes are in competition with local government jurisdictions for those funds. Tribal governments should be given increased opportunities to request and receive the administrative and financial resources needed to successfully implement and complete mitigation projects.
Desired State:

Historically marginalized and underserved communicates will be more competitive and more successful in the hazard mitigation grant application process.

Mimicking the FEMA Integration Team (FIT) program structure – or perhaps an add-on to the current FIT program – hazard mitigation subject matter experts would co-locate with the local, tribal, and territorial communities, with the sole purpose of assisting with mitigation project scoping, benefit cost analysis, application process, and navigating project implementation as well. This recommendation complements Recommendation 2021-14, as a specific example of greater mitigation program flexibility.

Providing assistance to local, tribal, and territorial communities in the scoping, development, and application submittal of mitigation projects, complements the current FEMA Hazard Mitigation Technical Assistance Program. The current technical assistance program provides resources in the form of project implementation, project management, and subject matter expertise, after mitigation funds have been awarded for identified projects. Mitigation-deployed staff would complete the full cycle of service, providing assistance to identify new mitigation projects, scope and benefit cost analysis development, application creation, and submittal. This model, when implemented, would provide marginalized and historically underserved communities an opportunity to be competitive in the mitigation application process.

This staffing model not only increases the capacity of the states’ hazard mitigation capabilities – by providing them with increased visibility and touchpoints with their local communities – it also provides underserved communities with the specific resources they need to successfully apply for mitigation projects.

Recommended Solutions:

02 – Increased Hazard Mitigation Assistance to Local, Tribal, and Territorial Communities

**Recommendation 2021-02:** The administrator should provide additional emergency management support to assist local, tribal, and territorial community leaders in underserved areas to strengthen their hazard mitigation capabilities.

Anticipated Impact:

- Improved application rate for FEMA disaster mitigation programs from historically underserved and marginalized communities.
- Successful implementation of hazard mitigation projects, including more projects and faster completion rates.
- Tribes and territories will have significantly stronger hazard mitigation capabilities.
- Reduced risk for future disasters.
- Increased community resilience.
CONSIDER DECLARATION CHANGES

Problem:
Marginalized and historically underserved communities that have been severely impacted by disasters do not receive equitable and appropriate levels of assistance.

Current State:
Marginalized and historically underserved communities do not have the resources to effectively mitigate or recover from disasters. For example, a recent flood event in the Mississippi Delta impacted a community for a third time in a two-year time frame. Some of the survivors had been affected by a previous flood event and were again impacted in the same area where the flood water remained for over 9 months. Over 300 homes were impacted by the event that was not federally declared. Many of the impacted homes in the community were not in a Special Flood Hazard Area (SFHA)\(^5\). Because survivors were not mandated to purchase flood insurance, many did not have coverage. Some survivors did have regular insurance policies, but those policies would not cover flood-related damages. These survivors would have to rely upon community assistance resources and volunteer repair and recovery capabilities. The survivors’ homes required the removal of flooring, suffered mold issues, and were ultimately uninhabitable. As a result of the damages, survivors had to incur hotel, renovation, and other relief expenses.

Desired State:
Individual Assistance (IA) support will be provided concurrent with a major disaster declaration. Expenses that are essential to day-to-day living and recovery are reimbursed. Obstacles to applying for and receiving assistance are resolved.

Recommended Solutions:

03 – Expand the Declaration Criteria
Recommendation 2021-03: When there are individual damages or lifeline disruptions, FEMA should automatically declare IA on any major disaster declaration.

04 – Tiered Approach to Individual Assistance
Recommendation 2021-04: Upon approval of an IA declaration, FEMA should consider establishing a tiered IA that can be scaled for consideration of assisting survivors in disaster impacts communities.

- Tier I (virtual IA assistance that could allow for submission of allowable reimbursable expenses – NO Disaster Recovery Center required)

\(^5\) An area having special flood, mudflow or flood-related erosion hazards and shown on a Flood Hazard Boundary Map (FHB) or a Flood Insurance Rate Map (FIRM) Zone A, AO, A1-A30, AE, A99, AH, AR, AR/A, AR/AE, AR/AH, AR/AO, AR/A1-A30, V1-V30, VE or V. The SFHA is the area where the National Flood Insurance Program’s (NFIP’s) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies (https://www.fema.gov/glossary/special-flood-hazard-area-sfha).
• Tier II (some state/territorial-managed client assistance working with the local or tribal emergency managers to work with identified impacted communities)
• Tier III (Scale up to fully resourced IA Assistance)

Anticipated Impact:

• Survivors will receive assistance faster.
• Survivors will be eligible for a broader range of expense reimbursements.
• Local and tribal governments will have increased support to deliver assistance.

REDUCE APPLICATION OBSTACLES

Problem:

FEMA’s requirements for proof of home ownership or rental occupancy in determining eligibility under Individual Assistance causes a disproportionate number of communities of color and low-income survivors to be denied disaster resources that would assist in their recovery. Many of these underserved populations throughout the United States are unable to provide a deed, title, or other official document to verify home occupancy or ownership to be eligible for assistance. Thus, a high number of disaster survivors filing an IA application receive denial letters.

Current State:

Particularly in the rural South, a considerable amount of Black-owned property has traditionally been passed down between family members as heirs’ property without ever being formally documented through deeds and wills. A recent Washington Post report revealed that nationally, FEMA denies approximately two percent of disaster assistance applications because of property title issues, yet in counties that are majority black, the rate is twice as high. The same Washington Post article spotlighted Hale County, Alabama which was impacted by a tornado in March 2021. Thirty-five percent of the disaster assistance applications from Hale County alone were denied because the survivors could not prove home ownership.6

Experience from recent hurricanes reveal similar stories. In the aftermath of Hurricane Katrina, over 20,000 homeowners in New Orleans were reported to have issues with property titles.7 Issues involving titles impacted 90% of low-income applicants for assistance in Houston following Hurricanes Rita and Dolly and over 77,000 applications in Puerto Rico following Hurricane Maria. A similar issue is that FEMA disaster assistance benefits are different for property owners (covers home repairs) and renters (covers only replacement of personal property). In Puerto Rico, most homeowners living in housing with no...

---

It is important to note that on September 2, 2021, a FEMA memo announced an amendment to FP 104-009-03, Individual Assistance Program and Policy Guide (IAPPG), Version 1.1 that was originally published on May 26, 2021. Included in this amendment was an expanded list of the types and acceptable dates of documents that disaster survivors may submit to verify home occupancy and ownership for any disaster declared on or after August 23, 2021.

Additionally, the IA Application process tends to lead to unintentional equity outcomes as survivors receive FEMA Denials letters. Out of survivor frustrations in their recovery efforts, adding the additional burdens and previous FEMA denial experiences, the applicants do not file for appeals due to a lack of resources and expectation that there is little likelihood of a change in determination. The result is many survivors do not receive the assistance they should receive. To protect the recent positive changes into the future, a more permanent solution is recommended in the form of Congressional legislation.

**Desired State:**

FEMA should take steps to ensure that any administrative requirements related to applying for and receiving Individual Assistance following disaster are culturally appropriate and as flexible as possible within statutory limitations. To achieve this flexibility while ensuring consistency between different regions, FEMA should apply the “get to yes” concepts contained in recommendation 2021-09 to Individual Assistance as appropriate. Further, FEMA should maximize efforts to prevent any intentional or unintentional consequences that exacerbate instances of inequity. The actions taken by FEMA to expand the documentation requirements for home occupancy and ownership through the policy changes to the IAPPG is a major step toward removing systemic barriers that disproportionately affect historically underserved and marginalized groups. These changes, however, are administrative and can easily be rolled back, modified, or completely undone by future Administrations.

**Recommended Solutions:**

05 – Alternative Proof of Home Ownership

**Recommendation 2021-05:** FEMA should continue to enhance the documentation options that disaster survivors must prove home ownership or occupancy beyond a formal title or deed to the property. Alternative forms of documented ownership should also be accepted for instances involving loss of a mobile home, and the impact to head of households that live in complex multiple household properties.

**Anticipated Impact:**

- Disaster survivors who do not have traditional home ownership documentation will have the ability to receive recovery assistance.

---

Expedite Disaster Assistance Subcommittee of the 2021 National Advisory Council

STREAMLINE THE PUBLIC ASSISTANCE PROGRAM

Problem:

The current Public Assistance (PA) program requirements are overburdensome, causing excessive costs for state management of the program and severe delays in receiving and obligating project funding.

Current State:

The NAC members surveyed public assistance applicants throughout the United States at the state, local, tribal, and territorial (SLTT) levels to gauge the areas where the greatest improvement could be made within the Public Assistance Program. Survey respondents consistently reported that the PA process feels disjointed, is overburdensome, and has far too many requirements. For example, the documentation requirements are often duplicative and excessive, require multiple reviews, and differ depending upon the FEMA staff providing support. Many respondents mentioned never wanting to use this program again due to the overly burdensome requirements. This is also true for the FEMA Mitigation Programs. These are among the main factors contributing to FEMA funding not being available in a timely manner.

The process of validating large PA projects creates an undue burden on applicants to provide large quantities of required documentation. This also creates long delays at FEMA in the review of that required documentation. The results are long delays in getting disaster funding out to affected jurisdictions. In-person Joint Field Offices are frequently expensive and cumbersome, further lengthening time it takes to process project applications. By moving to an online or virtual process, utilizing appropriate and available technology, FEMA can decrease the strain and turnover of staff by allowing them to work within their home regional office instead of deploying to the field for long periods of time after an incident. This is not possible with all positions, but for the longer-term coordination it would save time, save money, and provide a more stable work environment for FEMA staff.

The separation of projects into different categories increases the amount of work and complexity as applicants must sort the supporting documentation for multiple projects for the same site. By making changes to the program to streamline the process and reduce duplication and remove overly burdensome requirements, FEMA will be successful in expediting disaster assistance.

In addition, the current program processes, as designed, are not built for equity. The Public Assistance process is too burdensome, too complex, and requires too much staff time to manage effectively at the applicant level for applicants with minimal resources. Many of these applicants choose not to use FEMA programs due to the requirements of the program. These are the very jurisdictions that need the help the most.

Desired State:

Streamlined application and approval process that results in equitable access to services and funding.
Examples of specific actions include:

- Allowing multiple categories of work (C-G), at the applicant’s discretion, to be captured in a single project. This would eliminate the complexity of project creation and review.
- Reducing the number of Request for Information (RFIs), particularly reducing the number of substantially delayed RFIs (sometimes a year or more).
- Having different processing steps and requirements based on the dollar value of the project. The small project threshold should align with Small Purchase Procedures thresholds. Approvals should be made at the lowest possible administrative level so that faster payments can be made to applicants.
- Increasing the small/large project threshold to $1 million dollars from the current level of $132,800 dollars. At adoption in 1988, the small/large project threshold was $35,000 and small projects accounted 95% of the total FEMA PA projects but only 32% of project funding. Since 1988 the threshold has been increased several times, and currently sits at $132,800. However, now small projects only account for about 80% of total projects and about 3% of total funding. Clearly the increases in the large/small project have not keep pace with the increases in the value of PA projects and, as a result, a larger and larger share of projects have been moved out of the small project simplified procedures workflow each year. Raising the small/large project threshold would in future years move many small projects out of the large project category, allowing them to be processed under simplified procedures and greatly reduce the administrative burden on applicants and on FEMA staff.
- Take the lessons learned from the COVID-19 pandemic regarding remote workforce and make long-term changes to allow for most of the work to be conducted remotely. This will solve multiple concerns from SLTT governments and will expedite disaster assistance, including:
  - Using table-top and virtual site inspections, when appropriate, eliminating the time taken by coordinating in-person inspections.
  - Allowing the primary point of contacts to remain working with the applicant for greater consistency and less duplication of work related to constantly transitioning personnel.
  - Assessing projects using technology instead of deploying personnel to visit each individual site.
  - Saving federal tax dollars by not deploying large numbers of people to a disaster area, especially when those employees are working mostly in offices and on computers.
  - Reducing delays in completing disaster assistance reviews and approvals by eliminating travel and transitions by FEMA staff.
- Using U.S. Government Accountability Office (GAO) audit guidelines for validation of large amounts of documentation and adhere to GAO audit guidelines to reduce the sampling percentage and decrease amount of time for project obligation. This would result in smaller, scientifically designed 6% samples (or other smaller random samples recommended in GAO audit guidelines). The current project validation system is burdensome and involves unnecessary levels document validation, adding to project approval delays and slowing recovery. The transition to GAO audit guidelines would likely require FEMA to develop a training module to get many staff conversant in these methodologies. The result would be a much more efficient use of both federal and SLTT resources while still addressing internal controls targeting non-compliant expenditures and practices including combating fraud, waste, and abuse.
Refining the Streamlined Project Applications (SPAs) to promote structured information collection from applicants. The use of SPAs should also structure FEMA’s review of the information, requiring site inspectors and other FEMA staff with more field experience to review and provide input, especially with complex applications. FEMA staff with less experience are more likely to deny applications when there is uncertainty concerning what should be approved. This has resulted in the perception by applicants that FEMA is inconsistent in the application of its rules and procedures.

FEMA should re-evaluate policies related to debris removal to reduce information collection requirements and agency validation in the grant development process in order to expedite disaster assistance. FEMA should pivot to a risk-based monitoring strategy and focus on incentivizing speed and efficiency rather than adding additional bureaucratic requirements. The costs for increased document validation requirements by Applicants far exceed any real or perceived fraud and drastically increase administrative and operational complexity for all-hazards events. The current PAPPG v4 is overly specific and arduous for applicants to comply with issues related to hazardous limbs, trees, stumps, broken limbs, branch removal, tree removal, and stump removal. This leads to an “over accounting” of tens and thousands of individual trees in scenarios such as wildfires.

FEMA should re-evaluate policies related to force account Labor, materials, and equipment to reduce information collection requirements and agency validation in the grant development process to expedite disaster assistance. FEMA currently requests detailed, line-item summaries from applicants and then validates those summaries. This is a time-consuming process for both applicants and the agency. For example, to substantiate that a specific piece of equipment was used, FEMA will cross reference that piece of equipment with an employee working, which slows the delivery of Public Assistance when there is very low compliance risk to the government. FEMA should identify less-burdensome approaches to substantiate force account labor, materials, and equipment in a risk-based way that avoids line-item information requests and validation. This less burdensome approach should be similar to the higher-level validation of mutual aid and/or contracts (not line-item validations). Force account labor, materials, and equipment are inherently low risk to the government. These less-burdensome approaches should also apply to FEMA’s validation approach to large project sampling for document validation given the low compliance risk of force account labor, materials, and equipment (these are much lower compliance risk than large contracts).

Recommended Solutions:

06 – Decrease Public Assistance Bureaucracy

Recommendation 2021-06: The administrator should establish a high-level policy team to evaluate the PA program, and relevant infrastructure, with the primary goal of decreasing the bureaucracy to increase equity, expedite disaster assistance, and ensure those who most need the assistance are able to access the services.

Anticipated Impact:

- Reduced administrative burden on applicants.
- Reduced administrative costs and more efficient deployment of FEMA personnel.
- Improved consistency in the review and approval of applications.
- Expedited project approval.
• Faster payments to applicants.
• Expedited disaster recovery.
• Reduced amount of cost validation required in large, complicated projects.
• Improved timeliness and coordination of EHP reviews.
• Gathered and validated damage data completed by the government level closest to the event.
• Developed grants completed by the government level most benefited by funding.
• Increased participation in the PA program by SLTTs.

07 – State Led Approach

**Recommendation 2021-07:** The FEMA administrator should take steps to decrease federal management and oversight of the PA program to allow for more states to use the state-led approach.

A state-led approach is currently not feasible in most states due to lack of resources. FEMA should work with states to further determine what resources and staffing would be necessary to implement a state-led program with the goal of moving to this standard over the next five years. Recovery is strongest when federally supported, state-led, and locally driven (FEMA PA Principle 1). Examples of specific actions include:

• Provide train-the-trainer opportunities for local jurisdictions (e.g., emergency managers) in PA/project development.
• Create application flow chart with links (e.g., IRS Form 1040) to assist applicants in ensuring project requirements are covered during development.
• Provide more training to grants portal help desk personnel who often seem unable to answer questions.
• Ensure applicants are able to receive appropriate resources needed to access resources through the program.
• Explore the expansion of eligible management cost reimbursements and other avenues of technical assistance.

**Anticipated Impact:**

• Reduced administrative burden on applicants.
• Reduced administrative costs and more efficient deployment of FEMA personnel.
• Improved consistency in the review and approval of applications.
• Expedited project approval.
• Faster payments.
• Disaster assistance provided at the government level closest to the event, ensuring area specific needs are met.
• Expedited disaster assistance by allowing states to manage disaster assistance.
• Increased PA application approval rates and decreased approval timelines.

08 – “Getting to Yes” in Public Assistance

**Recommendation 2021-08:** The complexity of PA policy, guidance, and past audit decisions provides FEMA with a broad basis for decision making under its discretionary authority. Too often that discretionary authority is used to issue restrictive eligibility determinations without considering the discretionary authorities to approve projects and also failing to seek agreement among the different
levels of FEMA staff and with the applicant. The administrator should provide guidance and empower and train FEMA staff to work directly with applicants to resolve eligibility issues and mediate eligibility disputes; and should ensure FEMA policy is being utilized appropriately to approve eligible assistance rather than simply issuing a denial. Concerns of subsequent decision reviews can incentivize an unnecessary denial over a creative approval. Providing training for all FEMA staff on evaluating what could be done to “get to yes”, including training on the difference between law, regulation and policy, and creating consistency among FEMA regions on eligibility determinations. This would support a “People First” mentality.

The FEMA administrator can, however, empower FEMA staff members to work directly with applicants to constructively resolve eligibility issues and mediate eligibility disputes. This could reduce the issuance of Determination Memos and subsequent appeals through explicit direction to FEMA staff to provide assistance to the extent reasonable and approve the eligibility of projects (i.e., “get to yes”). By creating a structure that receives input from more experienced, solutions-oriented staff, the process can be implemented with a bias for approval, with a requirement that documentation supporting a denial must be approved by a supervisor or other highly trained and experienced individual.

To accomplish this, FEMA staff reviewing applications will seek innovative approvals within the available legislative authorities and will not be strictly constrained by policies not supported by statutory limits or regulations. There will be increased explanation provided to applicants in the event of denials, with links to any relevant statutory references. Applicants will perceive a greater consistency for grant application denials.

**Anticipated Impact:**

- Reduced administrative burden on applicants.
- Reduced administrative costs and more efficient deployment of FEMA personnel.
- Improved consistency in the review and approval of applications.
- Expedited project approval.
- Faster payments to applicants.
- Expedited disaster recovery.
- Increased PA application approval rate and decreased approval timelines.
- Reduced amount of cost validation required in large, complicated projects.
- Increased participation in the PA program by SLTTs.

**REDUCE PUBLIC ASSISTANCE INCONSISTENCIES**

**Problem:**

Decision-making in the PA program is inconsistent among FEMA regions and among FEMA staff, causing difficulty at the applicant level in navigating the program and in expediting disaster assistance.

**Current State:**

There is inconsistency with regard to eligibility determinations across disasters. The laws and policies associated with Public Assistance can be confusing and are often interpreted differently across FEMA
regions. Applicants get different answers, requirements, and decisions for similar grants. When FEMA staff changes before a project is closed out, which happens frequently, the applicants are often faced with new and burdensome requirements that have been imposed by the new staff.

Additionally, there is a lack of adequate consistency from staff such as Federal Coordinating Officers (FCOs) regarding requirements vs. recommended best practices. The Public Assistance Program and Policy Guide (PAPPG)\(^9\) is a compilation of FEMA patchwork fixes in policy that addressed specific situations which occurred during past disasters. It is a guidance document (policy), but it is often used as if it is a regulation (law). The guidance in the PAPPG does not precisely conform to the intent of the Stafford Act and promulgating regulations. When utilized as if it were a strict regulatory document, applications get denied that could otherwise easily be approved based upon actual statutory and regulatory requirements.

Finally, communications and coordination between applicants, site inspectors, program delivery managers (PDMGs), regional staff, and a consolidated resource center (CRC) are often insufficient. There can be a lack of visibility into the project eligibility decisions and conflicting guidance on eligibility. Often, one FEMA level overrules another FEMA level (e.g., CRC vs. PDMGs). This results in duplicative requests for information (RFIs) to applicants, which delays project approvals. The lack of communication and coordination within FEMA and with the applicant impedes the quick resolution of eligibility conflicts. Ultimately, disaster recovery resources are not provided in a timely manner.

**Desired State:**

Coordinated decision-making and operations that support innovative and integrated recovery outcomes.

**Recommended Solutions:**

**09 – Consistency in Public Assistance Delivery**

**Recommendation 2021-09:** The administrator should ensure the eligibility conditions defined in the PAPPG align with the intent of the Stafford Act and corresponding regulations as it applies to modern-day disaster related issues and should ensure consistency of PA delivery in all 10 FEMA regions. The administrator should require FEMA to have a one-stop shop for information, in a variety of formats, so it is easy for applicants to understand the relevant statutes and requirements. The objective is to create a single source for answers so that customers are not left to their own to conduct internet research and can readily find answers they confidently feel address their questions.

This recommendation is in support of FEMA PA Principle 2. Examples of specific actions include:

- Clarifying the difference between law and policy and providing consistency across FEMA regions on eligibility determinations.
- Streamlining policies that govern FEMA to expedite disaster assistance, with a focus on incentives that result in innovative, cost-effective, and results-oriented recovery and mitigation solutions.

---

• Making recommendations to Congress on statutory changes that will result in expedited disaster assistance.
• Removing requirements not within the mandate of FEMA, including but not limited to, environmental and historic preservation (EHP) requirements. FEMA has adopted and enforces additional EHP requirements despite not being an environmental or historic preservation agency or a regulatory agency at all. This often creates conflicting EHP reviews. There should be only one environmental or historic preservation review at the federal level.
• Creating greater communications between PDMGs and CRC staff. Internal guidance to PDMGs, Region staff and CRC staff as to who takes precedence to ensure consistent eligibility determinations, or a requirement for coordinated resolution of eligibility decisions grounded in policy with applicant involvement to decrease requests for information and appeals.
• Utilizing more local staff who understand the complexities of each area who can guide additional FEMA staff that assist after a disaster.
• Developing and utilizing a one-stop shop for information sharing in a variety of formats, so it is easy for customers to understand the relevant statutes and requirements. Such as easily accessible online videos/tutorials.
• Creating a call center staffed with representatives with thorough knowledge of the application requirements to escalate questions, ideally with field experience. The objective is to create a single source for answers so that customers are not left to their own to conduct Internet research and can readily find answers they confidently feel address their questions.

Anticipated Impact:
• Reduced administrative burden on applicants.
• Reduced administrative costs and more efficient deployment of FEMA personnel.
• Improved consistency in the review and approval of applications.
• Faster project approval.
• Faster payments to applicants.
• Expedited disaster recovery.
• Increased PA application approval rate and decreasing approval timelines.
• Broader ability to approve applications and allow for innovative consideration and flexibility to be applied to specific scenarios when making eligibility decisions.
• Reduced perceptions of inconsistencies in the denial of applications.

EQUITABLE DIGITAL MODERNIZATION

Problem:
FEMA’s digital tools and processes are outdated and do not meet the needs of today’s environment.

Current State:
There is currently no readily available method for submitting digital information to FEMA. Applicants that do use digital data collection or GIS tools have no standardized format for collecting or submitting information. Rich digital information often must be exported into printable PDF documents, costing time
and losing vast amounts of supporting information. The current system forces users to senselessly break large files into smaller ones, and FEMA staff are prohibited from using standard tools for sharing large files outside of closed portal systems such as Dropbox™, shared networks, and flash drives. As a result, sharing preliminary damage assessment (PDA) has become problematic and adds unnecessary time and complexity to the process. The current system is outdated and is the source of complaints from applicants who are accustomed to using modern digital tools in other areas of their work.

In addition, the direct and indirect cost required to adopt what digital collection or management tools are currently available has resulted in a lack of equitable access, whereby small or less affluent applicants cannot afford the software cost or lack the funds to hire or contract the staff needed to deploy them. With changes, FEMA would be able to review documentation as soon as it is available and not have to wait until it can deploy to a state. Additionally, with the COVID-19 Pandemic, many FEMA operations have had to be done remotely, and the capability to seamlessly share data is more important than ever.

**Desired State:**

Standard operations that support flexible and integrated recovery outcomes. This is in support of FEMA PA Principle 2.

**Recommended Solutions:**

10 – Equitable Access to Modern Systems

**Recommendation 2021-10:** The administrator should ensure equitable access to secure modern digital data collection and other secure digital tools (e.g., GIS) to support the grant application process, as well as technical staff that may be needed to support their use, by providing applicants with technical staff and/or subsidized software licensing. The necessary funds or software licenses should be made available immediately to eligible applicants upon declaration of a disaster so that they are available to support the application process. Such resources should also be made available under existing resilience grant programs, enabling municipalities to digitally stage data relevant to the PA application process in software systems used and maintained on a regular basis. This will enable asset data needed for PA applications to be readily available and current when needed.

**Anticipated Impact:**

- Ensuring that smaller or financially disadvantaged applicants are no longer disadvantaged by an inability to allocate the needed resources to submit a grant application, and in many cases, it would expedite the time required to approve the applications.
- Enabling a dramatic reduction in time and resources needed by the applicant to prepare and submit an application in the aftermath of a disaster by giving potential applicants the ability to collect and manage relevant data prior to the onset of any disaster.

11 – Single Secure Platform for Grant Lifecycle and Creation of Resilient Open Architecture for Digital Data

**Recommendation 2021-11:** The administrator should approve the development of a single platform to be used by all stakeholders (including FEMA grant applicants) to access and manage all grant-related information in a single system. The existence and use of the Grants Manager and Grants Portal
Platforms can result in confusion when seeking assistance as different users are presented with different interfaces to the same system, as well as different information. There should be only one interface for all users, whether through consolidation of the existing platform or through the development of a new platform.

In addition, the administrator should commit FEMA to supporting or sponsoring the collaborative creation of an open architecture for the digital collection and management of damage assessments and other relevant information. This would ensure that large amounts of data could be collected in advance, maintained on an ongoing basis on platforms that supported the data standard, and effectively “staged” until needed. At that time, any data needed to support a grant application could be transferred swiftly to FEMA without delay. FEMA should support and encourage the creation of innovative digital tools that are compatible with the open architecture in areas that could include the collection, storage, management, or automated processing of information. This open architecture should become the native structure for storing and managing data within the FEMA grant management system.

The optimized single platform should include the following capabilities:

- Applicants should have the ability to authorize multiple users from the same organization to delete or modify documents and other data previously or prematurely submitted. Currently, only the user who uploaded a file may modify or delete it.
- The platform should be optimized for the upload and mass classification of files with standardized labeling, eliminating the current requirement for users to type descriptors for each uploaded file.
- The platform should provide users with authoritative and tailored information regarding all documents and information required for submission from the outset of the process, and an SPA-based method to progress through the application. The platform should include a variety of support tools, including real-time chat capable of providing both technical support related to the system as well as support for grant application requirements. Additional training for the help desk personnel is recommended, as it is reported that they are often unable to answer questions. Also, the creation of an application flow chart with links (e.g., IRS Form 1040) is recommended to assist applicants in ensuring project requirements are covered during development.

**Anticipated Impact:**

- Reduced administrative burden on applicants.
- Reduced administrative costs and more efficient deployment of FEMA personnel.
- Improved consistency in the review and approval of applications.
- Faster project approval.
- Faster payments to applicants.
- Expedited disaster assistance by reducing the timeframes of collection, submission, and review of this required information. The richness of the data would reduce the need for additional request for information during the approval process, thus expediting the approval of applications.
- Allow states to review and sign off in digital format.
- Allow for a universal platform across PA, grant programs, and other relevant areas, such that applicants to different programs or funding sources need not duplicate the same information (e.g.: photos, dimensions, costs) when submitting multiple applications.
Allow for the rapid exchange of rich data among stakeholders and within FEMA.

Utilizing a standardized open architecture would encourage the private-sector developers to create an ecosystem of compatible data collection and management software, similar to the suite of Keyhole Markup Language (KML) software choices available. This would result in new and innovative capabilities and functionalities to aid applicants.

Increasing the PA application approval rate and decreasing approval timelines.

Addressing the frequently expressed complaint in the survey conducted by the NAC that applicants find it extremely difficult to submit large files to FEMA.

Prepares disaster data for use of innovations in artificial intelligence (AI) tools.

Reducing the complexity of the development of AI analysis tools that could instantly review and approve many types of applications, which in turn could enable the approval of many applications in seconds without human intervention.

Ensuring jurisdictions that currently lack the resources or capability to deploy digital tools would be able to do so from the outset of the grant application process.

Reducing the burden on the applicant to manually submit information, which is anticipated to dramatically reduce the time required to approve applications.

12 – Application Programming Interface (API) for Systems Integration

**Recommendation 2021-12:** The administrator should facilitate a cross functional application integration through creation of an online application programming interface (API) to allow direct electronic submission of complete grant application information from private sector grant application support tools and expand direct application to all categories of work. This will result in a “TurboTax®-like” experience for grant applicants. The API should support the electronic submission of application form information and other digital data directly into FEMA’s grant management system, where automated tools can immediately evaluate the application against pre-determined rules. Where possible, a goal should be the automated instant approval of most applications below a designated dollar threshold. The API should also enable the ability to upload or synchronize object data from relevant asset management software tools that utilized the open data standard referenced in Recommendation 2021-12. The information submitted through the API should be readily available in FEMA’s Grant Portal, where today the object data must be entered manually into the grant portal using a time-consuming guided form process. The API should provide the ability for authorized users to review, delete, or modify documents or other data previously or prematurely submitted using any compatible tool. Whenever possible, the API should provide the ability to use digital signatures/approvals from end to end.

FEMA should encourage private sector software companies to develop software that is compatible with the new API, including the provision of technical support to developers, with the objective of ensuring applicants have a robust ecosystem of choices available.

We encourage the administrator to collaborate with other agencies to create a single government-wide API standard for grant applications. Many other agencies, including DHS, all maintain stove-piped systems for grant application information submission. These duplicative systems require duplicative federal spending for each relevant agency and increase complexity for applicants. A single API would enable clients/stakeholders to utilize the same “TurboTax®-like” software to apply for any federal government grant application.
As an interim and temporary measure until this is completed, an immediate impact could be achieved by allowing for the submission of large files using any of several cloud-based file sharing tools in widespread use by applicants (e.g., Dropbox, Box, OneDrive, etc.).

**Anticipated Impact:**

- Reduced administrative burden on applicants.
- Reduced administrative costs and more efficient deployment of FEMA personnel.
- Reduced complexity and cost to submit applications, resulting in more equitable access to grant funding by smaller or underprivileged applicants.
- Improved consistency in the review and approval of applications.
- Faster project approval.
- Faster payments to applicants.
- Expedited disaster assistance.
- Increased PA application approval rate and decreasing approval timelines.
- Incentivized private-sector developers create an ecosystem of compatible data collection and management software similar to the suite of personal tax software choices available that utilize an API created by the Internal Revenue Service (IRS) for direct digital submission.
- Dramatically reduce the complexity as well as the time and resources required to submit a grant application and would further ensure that the application is submitted with the necessary supporting information to ensure a prompt review and response. Ultimately, it would respond to the request by multiple stakeholders to create an intuitive, user-friendly “TurboTax-like system” for the submission of PA applications and would significantly expedite the approval of applications.
- In the event a standardized API were to be created across the federal government, it would reduce duplicative federal spending on grant application and management systems, saving tax dollars, and enabling clients/stakeholders to utilize the same “TurboTax-like” software to apply for any federal government grant application.

**MITIGATION & RESILIENCE**

**Problem:**

FEMA’s mitigation programs are often too difficult to manage, especially for smaller jurisdictions, and they do not currently build infrastructure back stronger to decrease repetitive losses from future disasters.

**Current State:**

The development of feasible mitigation projects entails engineering and financial analytics which are challenging to all applicants, but particularly to those applicants less experienced with Public Assistance and those less well-resourced. This has led to an equity issue where less experienced and less well-resourced applicants are unable to capitalize on this aspect of the PA program, even as an awareness of the importance of mitigation has grown among all applicants in recent years.

The NAC survey registered a general desire among applicants, both large and small, for a greater ability to leverage mitigation investments. Recently the US has seen more frequent and more severe disasters,
more frequent and stronger tropical storms, more frequent and more severe wildfires, and other events. Most scientific reports ascribe the increased severity and frequency of large, costly disasters to the expected outcomes of climate change. But despite the increase in the cost of disasters, there has not been a parallel increase in spending on mitigation within the Public Assistance program. Additionally, the current amounts available for mitigation through the PA Program, and other FEMA mitigation programs, are not in alignment with construction costs or with the needs to build back better.

In order to decrease repetitive losses from disasters, large investments must be made in mitigation infrastructure improvements instead of merely repairs. Further, the current methodologies for validating and approving mitigation awards favor well resourced, dense, high-cost jurisdictions and significantly disadvantage more sparsely populated, less well-resourced regions of the country. This has resulted in a distribution of mitigation dollars that is concentrated in more dense and wealthy areas of the country and leaves many of the more rural areas of the county underserved.

FEMA has already begun to recognize these issues, for example in August 2021 edition of the Building Resilient Infrastructure and Communities (BRIC) program, FEMA outlined changes which are aimed at improving the equitable distribution of funds. These changes include adjustments to the scoring system that will make it easier for disadvantaged rural communities to receive more points in the competitive award process than was possible previously.

**Desired State:**

Increased participation by less densely populated, less well-resourced applicants in leveraging hazard mitigation programs to mitigate increasing incident impacts. This would be in support of FEMA PA Principle 3.

**Recommended Solutions:**

13 – Greater Mitigation Program Flexibility

**Recommendation 2021-13:** The administrator should develop program guidance and adjust FEMA policies and procedures to allow for greater flexibility in mitigation programs to allow applicants to build resilient infrastructure to decrease repetitive losses. Building more resilient infrastructure should be the normal process for PA instead of having it be a separate piece with limited funding. Examples of specific actions include:

- Defining methodologies for the creative application of funding from multiple mitigation grant streams to one project, or to multiple projects on one campus. Mitigation investments frequently benefit from economies of scale in reaching a justification, or approval, through the FEMA Benefit-Cost Analysis (BCA) methodology. Larger projects often achieve a higher benefit cost ratio (ratio of the net present value of benefits to costs). FEMA has recognized this in recent versions of the FEMA Public Assistance Program and Policy guide which allow, under limited circumstances, the coordination of PA Mitigation (406) and HMPG mitigation (404) funding.
Utilizing past experience with the FEMA HUD CDBG-DR Flexible Match Guidance\(^\text{10}\) which describes for applicants a methodology for funding the non-federal share of FEMA PA grants with HUD CDBG-DR funds. This methodology, crafted in partnership with HUD, has been very helpful to applicants in identifying procedures for maximizing the efficient use of different streams of Federal funding. Other potential federal agencies where the benefits of coordinated funding could be large include the U.S. Army Corps of Engineers (USACE), Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Bureau of Land Management (BLM), among others.

Providing training and regular guidance to ensure that site inspectors, PDMGs and Region staff are experienced and qualified enough to promote mitigation and assist applicants in the development of mitigation investments (406 and even 404). FEMA can proactively attack this problem by empowering staff members to work directly with applicants to develop mitigation projects and leverage the PA program to ensure all communities suffering disasters benefit from the 406 and 404 mitigation programs. This effort would particularly support communities less experienced in PA or those less well-resourced to navigate the complex FEMA mitigation project development procedures.

Altering the formula to enable easier investments in mitigation.

**Anticipated Impact:**

- Provide flexibility that may allow more large mitigation projects to be funded and approved.
- Allow the use of these opportunities to become more widespread, allowing a greater number of smaller jurisdictions the flexibility to achieve significant investments in large mitigation projects that currently are beyond their reach.
- Provide smaller applicants with the technical assistance from FEMA staff and the additional funding to develop and win approval of larger mitigation projects through the pooling of more than one mitigation funding stream.

14 – Reduce the Benefit-Cost Analysis Discount Rate

**Recommendation 2021-14:** The administrator should work with Office of Management and Budget (OMB) to adjust the discount rate used in FEMA’s BCA Toolkit V6.0\(^\text{11}\) annually, as indicated in Appendix C of OMB Circular A-94\(^\text{12}\). The 7% discount rate used in FEMA’s BCA Toolkit, is far higher than current US Treasury rates and arbitrarily reduces the estimated present value of mitigation project benefits. OMB’s annually updated discount rates are far below 7%, since they are based largely on current US Treasury interest rates and inflation. Use of the current 7% discount rate in FEMA’s BCA undervalues the future estimated benefits and avoided damages of projects. Continued use of the high 7% discount rate favors jurisdictions with: a) the resources to maximize the arduous BCA methodology and b) jurisdictions with dense and expensive built environments. The fixed 7% discount rate has set an effective barrier to the participation of smaller jurisdictions. Those applicants without a dense and expensive built environment

---


are mathematically unable to accumulate sufficient large benefits (damages averted in the BCA methodology) to withstand 30-50 years of discounting to the present value at a 7% rate. This barrier runs contrary to the administration’s equity policies and the intent of mitigation programs.

As currently being implemented, FEMA’s BCA methodology has institutionalized a process that favors jurisdictions with the internal capacity (or expert consultant support) to successfully leverage the arduous BCA methodology and who are also jurisdictions with high density, expensive built environments whose benefits (avoided damages) can survive the arbitrarily high discount rate to win benefit-cost ratios exceeding 1.0.

**Anticipated Impact:**

- Encourage more jurisdictions from lower cost, less heavily populated regions of the country to use the existing BCA methodology to win approval and implement larger mitigation investments.
- Approved large mitigation projects from smaller jurisdictions will decrease repetitive loss claims and future disaster damage costs.
Vision 2045 Subcommittee of the 2021 National Advisory Council

The NAC’s vision for FEMA is a national emergency management framework that ensures that the United States and its citizens are well-prepared for all-hazards disasters, are risk-aware, and are resilient by 2045. We envision a FEMA that coordinates across local, state, regional and national levels an effective, real-time identification, management, mitigation, response, and recovery framework for existing and emerging threats to the United States, its people, their lives, and their livelihoods. The guiding principles for FEMA are Equity, Resilience, Efficiency, Professionalism, Accountability, Science-based, Data-driven, and Collective Endeavor.

To advance this vision, we describe specific recommendations below.

STRENGTHEN DISASTER SUPPLY CHAIN CAPABILITIES

Problem:
A major disaster, or simultaneous disasters across the country can quickly disrupt supply chains that provide resources to impacted communities.

Current State:
FEMA’s current logistics model moves resources across the country at costs of tens of millions of dollars. FEMA currently has eight permanent distribution centers in the United States, as well as contracts and agreements with public and private sector partners. FEMA also has the ability, with the help of federal partners, to establish additional mobile distribution sites at the regional level.

Desired State:
With the lessons learned from the supply chain disruption through the nation’s response to COVID-19, the rise in short notice events, rapid intensification of storms such as Hurricane Ida in August of 2021, and the ability to tailor logistics needs to each region all suggest a move towards a more permanent decentralized logistics hub model. This will increase capability and capacity to manage disasters and increase regional resilience. This model will also increase the use of mutual aid and assistance between states and across regions, as partnering and assisting states/regions will have more resources to draw from at the regional level to help their neighbors respond to and recover from disasters.

Recommended Solutions:

15 – Adequately resource Logistics Distribution Hubs

Recommendation 2021-15: With the lessons learned from supply chain disruptions in response to COVID-19, the FEMA administrator should establish and adequately resource regional logistics distribution hubs to meet the needs of each region, in coordination with SLTT partners that will be served by those hubs.
Anticipated Impact:

- Increased regional resilience.
- Faster delivery of resources to impacted communities.
- Better coordination of resources at the regional level.
- Increased supply chain resilience.

DEVELOP COMMON RISK FRAMEWORK FOR COMMON OPERATING PICTURE

Problem:

As the U.S. addresses the continuing effects of the COVID-19 pandemic, along with another costly year in terms of lives, livelihoods and communities affected by a range of multi-billion-dollar disasters across the country, the need for an enhanced national risk management framework is evident and urgent. Chief among the questions being asked is how to fund the calls to build back, and build back better, while objectively and critically evaluating whether some communities should be built back at all. This is particularly true if a community’s hazard exposure, building codes, and local socio-economic conditions do not allow for long term resilience.

In short, a comprehensive, and well-accepted approach to strategically identifying, measuring, managing, and mitigating risk is urgently needed, while creating deterministic frameworks for post-disaster economic recovery and investing in resilience. The nation faces a substantial insurance protection gap, which is the shortfall between private insurance, public risk response funds and those risks ultimately borne by taxpayers. Bridging this insurance protection gap is both a key need and the opportunity where FEMA can help structure new approaches to national economic risk sharing.

The advent of a comprehensive national risk management framework can help address these critical questions and, importantly, create a cohesive risk and resilience framework for the U.S.

Current State:

The current state of risk management and approaches to national resilience in the U.S. is a patchwork of varying degrees of risk readiness at the SLTT levels across the country. Meanwhile, the number of communities across the U.S. that are facing record-breaking whole of society threats and disasters continues to grow. With this growth, there is a widening gap in what types of disasters and hazards are contemplated from an economic resilience and recovery perspective. The void of a cohesive national approach to risk management, leads to ad hoc post-disaster funding, response, mitigation, and long-term recovery capabilities.

Within the Federal government, there are several tools and efforts underway that can be leveraged holistically by communities in terms of prioritization, standards development, and investment strategies to mitigate risk. Risks are manifesting themselves in acute and attritional ways, with acute events being triggered by the confluence of natural hazards exacerbated by climate change. Meanwhile, attritional risks are being accelerated by national infrastructure that was designed and built in the last 50 years. Indeed, confronting 21st century challenges with last century’s playbook, institutions, infrastructure, and frameworks is one of the areas posing challenges to creating a more resilient nation.
**Desired State:**

In the desired future state, a comprehensive FEMA National Risk Management Framework will inform risk, readiness, and resilience decision-making and investments in a harmonized way across the country. Critically, the adoption of a National Risk Management Framework will help inform risk-adjusted investment decisions at all levels and as a share of local economic output (or gross domestic product) to avoid the prospect of ad hoc disaster response funding, which is tantamount to buying insurance when the house is on fire. Another critical component to include in a national risk management framework is the ability to measurably “crowd in” blended risk capital from both public and private sources.

This can help bridge a yawning national protection gap and allow for the benefits of compounding investments, while creating investment grade opportunities for alternative risk capital such as catastrophe bonds, reconstruction, and resilience bonds, among others. An enduring model for mutualizing shared risk is the paid-in structure that underpins the public-private risk mutualization approach followed by the U.S. banking sector and the Federal Deposit Insurance Corporation (FDIC).

The recent deployment of a National Risk Index (NRI), which looks at natural hazards across the U.S., offers guidance for how a comprehensive National Risk Management Framework can be developed and deployed. Measuring risk, and having common taxonomy and data sets, that harmonize approaches to risk across the country are a crucial first step. Additionally, to focus disaster preparedness energy and investments in resilience in the right risk-adjusted areas, the risk management framework should also capture approaches to understanding the materiality of a complex and deeply interconnected risk environment. For example, in most cases, addressing climate change - a veritable ‘risk of risks’ - will require both investments in resilience and upgrading infrastructure and divestments from carbon hungry sectors or single source of failure infrastructure to occur in lockstep.

**Recommended Solutions:**

16 – Develop a National Risk Management Framework

**Recommendation 2021-16:** Developing a National Risk Management Framework that supports creating a national marketplace for risk transfer, insurance, catastrophe bonds and other financial innovations that support mutualizing economic loses, prefunding investments in resilience, crowding in private sector insurance and capital markets innovations, and shoring national resilience and risk recovery capabilities. Over time, a risk marketplace or “reverse auction” can help combat adverse selection, improve community buying power by spreading risk, while pooling disaster funding in a more strategic, actuarily sound way that makes U.S. taxpayers an insurer of last resort, rather than a first line of defense.

17 – Link the National Risk Index to the proposed National Risk Management Framework

**Recommendation 2021-17:** This action will contribute to improving national insurance and risk transfer buying power by crowding in structured demand across the country and structured risk capital from public and private balance sheets by leveraging the law of large numbers, risk, and hazard diversification.
18 – Harmonize Risk and Resilience frameworks

**Recommendation 2021-18:** Review the co-creation of standards, self-assessments and tools that support community level development of risk and resilience frameworks, including qualitative and quantitative approaches to evaluating impacts. Consideration for partnering with the National Institute of Standards and Technology (NIST), academia, and other standard setting bodies can create and codify a harmonized national approach.

19 – Review and address insurance redlining

**Recommendation 2021-19:** Reviewing equity and veritable “insurance redlining” in existing risk transfer and insurance programs, while analyzing the actuarial soundness of existing FEMA funded insurance vehicles, such as the National Flood Insurance Program (NFIP), is needed. This evaluation should also consider the unintended consequences of existing insurance programs, that may create a moral hazard or where indemnification principles (e.g., merely making a person whole versus replacement cost valuation methods that can support upgraded building codes or relocation) are not in line with risk-resilient building codes or untenable disaster-prone areas.

**Anticipated Impact:**

- Improved and common understanding of all-hazards risks.
- Enhanced decision-making related to building resilience and rebuilding after disasters.
- Enhanced funding and insurance models for investments into mitigation, resilience, and recovery that explicitly incorporate equity and climate change considerations.

BUILD HUMAN CAPITAL AND CAPACITY

**Problem:**

Lack of professional pathways within FEMA. FEMA’s mission has evolved significantly since the agency’s founding in 1979. Originally structured to respond to occasional catastrophic events, FEMA now regularly responds to multiple major disaster declarations each year. In 2020 alone, our nation experienced 22 separate billion-dollar plus weather and climate-related disasters, totaling $95 billion in damages.\(^{13}\) The trend is expected to continue, as advancing impacts of climate change contribute to an increase in the frequency and severity of extreme weather events. The impact of persistent, repetitive demands on personnel and staffing has been detrimental to FEMA’s workforce morale, retention, and recruiting potential.

Since 2016, FEMA’s operational stance has been that “everyone is an emergency manager.” Yet this approach to personnel and workforce structure has left specialized skills and capabilities unrecognized, unappreciated, and underutilized. As a result, workforce burnout is a growing threat to maintaining continuity of operations and adequately preparing for future events. It directly undermines the ability

for FEMA to execute its strategic plan as well as meet the needs of the American people in the face of growing threats to our national security and social fabric.

**Current State:**

Relative to other federal agencies, FEMA has struggled to retain employees. While the emergency and disaster response role required by nature of employment at FEMA emergency nature of can be emotionally and physically draining, exit surveys reveal that many did not feel their roles were fulfilling and that managers did not do enough to shepherd individuals along a career path. An additional outcome of high attrition at FEMA is a loss of institutional knowledge and degraded relationships with SLTT stakeholders.

These problems are not new to FEMA leadership. We recognize and applaud execution of the Professional Development Pathways Assessment (PDPA) project, launched to assess “current programs and tools, study external career models relevant to FEMA, consider employee identity within the Emergency Management mission space, and hear the voice of the employee – all employee types and grades, specialties, levels of experience, at all locations.”

**Desired State:**

FEMA should become the agency that the nation needs and that its employees deserve. FEMA personnel are passionate and mission-oriented to help in times of crisis. They deserve a clear pathway to fulfilling their personal and professional objectives and potential.

The “FEMA that the employees deserve” requires a new culture to be identified and constructed within FEMA. The NAC urges FEMA administrator to review current structures, processes, and professional development opportunities to provide intentional and multiple career pathways to professionalize the FEMA workforce and improve employees’ understanding of their place and contribution to the Agency, offer a long-term vision for professional development, and ultimately foster a sense of belonging and loyalty.

Alongside this, the onboarding process for new FEMA employees requires excessive mandatory training, much of which is unrelated to an individual’s position. Also lacking is a conveyance of FEMA “culture,” or a sense of position in the broader organization, resulting in diminished loyalty.

For new employees, the onboarding process should instill a sense of purpose, place, and duty. Employees should be offered opportunities for mentorship and networking. Existing employees should be offered continual and sustainable learning opportunities. To meet Vision 2045, the FEMA’s workforce should be incentivized to advance their knowledge of and expertise in emergency management, including having access to curricula in data science, robotics and artificial intelligence (AI), climate change science, climate justice and equity standards that result in academic credentials or certificates.

There should exist clear pathways or tracks for professional development that FEMA employees can advance through and become specialists, including through:

a) Education,

b) Trainings and certifications,
c) Participation in incident command, advancing within the National Incident Management System framework for emergency management specialists, and,
d) Experience in response settings.

Restructuring to allow for multiple professional pathways should also serve as a model for the broader emergency management profession. State-level departments of emergency management share similar struggles as FEMA in terms of employee morale, sense of place and professional development. Implementation of these recommendations are intended to have impact as a model for regional, state and local emergency management. Long term, training and mentoring the next generation of emergency management professionals is critical to building capacity in our communities and throughout the nation. Creating these pathways now will facilitate the creation of a cadre of emergency managers that has the professional and educational resources to meet our nation’s future needs for disaster mitigation, preparedness, response, and recovery.

Recommended Solutions:

20 – Create Professional Pathways within Existing FEMA Workforce

Recommendation 2021-20: The administrator should –

- Create professional pathways for the FEMA workforce, with initial findings from the PDPA and a draft plan reported out by the end of 2021. The final plan should be developed by April 1, 2022. This plan should align professional development and training opportunities with the vision, mission, and values of FEMA’s Strategic Plan with a focus on Equity, Climate Adaptation and Readiness.
- Engage in conversations with current and former FEMA staff members at all levels to understand how the culture of FEMA can be shifted to focus on shared strategic goals of equity, readiness, and climate adaptation.
- Consider the following actions to further improve workforce satisfaction:
  - Provide opportunities for all FEMA staff to participate in field response using the incident command system to appreciate execution of FEMA’s mission.
  - Create and incentivize formal internship and mentoring programs at FEMA to foster appreciation of emergency management and expand the understanding of different roles within FEMA.
  - Reduce the complexity of hiring and employee separation.

21 – Improve Pathways and Pipelines for Future Emergency Managers

Recommendation 2021-21: The administrator should –

- Support existing and emerging programs that seek to improve the pipeline of individuals underrepresented in emergency management, including curricula development, through grant opportunities, mentoring opportunities, internships, fellowships, and sponsorship.
- Identify opportunities to build capacity across K-12, post-secondary 2-year and 4-year educational institutions across the nation to produce and/or expand curricular offerings (certificates, undergraduate and graduate degrees) available to students that explicitly 1) lead to emergency management careers with well-defined learning outcomes, 2) increase awareness of and normalize scientific concepts of disasters, climate change, equity, insurance, mitigation, preparedness, and
resilience, and 3) develop soft skills as well as technical competencies that facilitate a successful professional career.

- Developing and executing this effort, potentially led by Emergency Management Institute (EMI), should be conducted in coordination with the Department of Education for K-12 opportunities, including high school to higher education emergency management pathways; 2-year and 4-year colleges and universities including Historically Black Colleges and Universities (HBCUs) and Minority Serving Institutions (MSIs); in addition to working with NEMA and IAEM for programming that improves awareness of emergency management education and careers;
- Expanding on existing partnerships and deepening existing relationships with K-12 and post-secondary institutions – leveraging the “EMI Anywhere” concept - will help meet the needs of the future workforce envisioned for FEMA 2045.
- Leveraging existing and proposed models of team-based service programs such as NSF Cyber Corps, FEMA Corps, and the proposed Climate Conservation Corps models to encourage entry to emergency management careers and secondary education in emergency management.

**Anticipated Impact:**

- The FEMA that the nation needs is the same as the FEMA employees deserve. Aligning the FEMA workforce and culture with a reflection of the American public – to be diverse, equitable and inclusive - is necessary to meet the increasing demands from our changing climate and economic vulnerability. Successful and rapid execution of these recommendations will naturally align the workforce with the Strategic Plan. Attrition levels can be expected to diminish; commitment and sense of allegiance to the agency will increase, and in turn, FEMA’s ability to execute its mission, including engagement with SLTT stakeholders, will be successful.
- By addressing needed culture change within FEMA, it stands to serve as a standard-bearer to the broader emergency management community. Creating these pathways creates opportunities outside the agency and in neighborhoods and communities for citizens to embrace emergency management and emergency awareness.
ACKNOWLEDGEMENTS

2021 Members of the National Advisory Council:

Jeanne Abadie
Area Manager, Office of Aging and Adult Services, Louisiana Department of Health
Baton Rouge, Louisiana

Rich Baich
Executive Vice President, Chief Information Security Officer, AIG
Charlotte, North Carolina

Sue Anne Bell, Vice-Chair of the Vision 2045 Subcommittee
Assistant Professor, University of Michigan
Ann Arbor, Michigan

Steve Birnbaum
President, Resudox Solutions, LLC
Arlington, Virginia

Donald Bliss, Vice-Chair of the Expedite Disaster Assistance Subcommittee
Vice President, Field Operations (Ret.), National Fire Protection Association
Quincy, Massachusetts

Donna Boston
Senior Manager, Business Resilience & Emergency Planning, Southern California Edison
Silverado, California

Paul Brennan
Director, Pre-Hospital EMS and Preparedness Coordinator, Lawrence General Hospital
Lawrence, Massachusetts

Deanna Dahl-Grove
Associate Professor, Pediatric Emergency Medicine, Rainbow Babies and Children’s Hospital
Cleveland, Ohio

Dante Disparte
Founder and Chairman, Risk Cooperative
Washington, District of Columbia

Paul Downing
Indian Township Tribal Council Member, Passamaquoddy Tribe at Indian Township
Indian Township, Maine
Charley English  
National Emergency Management Liaison, American Red Cross  
Fairfax, Virginia

Charles Esteves  
Administrator, Guam Office of Civil Defense  
Agna Heights, Guam

John Grathwol  
Deputy Director (Ret.), New York City Mayor’s Office of Management and Budget  
New York, New York

Jeffrey Hansen, National Advisory Council Vice-Chair  
Director, Office of Emergency Management, Choctaw Nation of Oklahoma  
Durant, Oklahoma

Lori Hodges  
Director, Office of Emergency Management, Larimer County, Colorado  
Fort Collins, Colorado

Patricia Hoffman  
Acting Assistant Secretary for Electricity, Department of Energy  
Washington, District of Columbia

Lisa Jones, Chair of the Equity Subcommittee  
Director (Ret.), Office of Homeland Security and Emergency Management, City of Phoenix  
Phoenix, Arizona

W. Nim Kidd, National Advisory Council Chair  
Chief, Texas Division of Emergency Management; Vice Chancellor, Texas A&M System  
Austin, Texas

Ramesh Kolluru, Chair of the Vision 2045 Subcommittee  
VP for Research, Innovation and Economic Development, University of Louisiana  
Lafayette, Louisiana

Linda Long  
Battalion Chief, Philadelphia Fire Department  
Philadelphia, Pennsylvania

Jackie Lindsey  
Fire Chief, Santa Fe County Fire Department  
Santa Fe, New Mexico
Warren Miller, Vice-Chair of the Equity Subcommittee  
State Representative, NVOAD Board of Directors  
Jackson, Mississippi

Nicolette Louissaint  
Executive Director, Healthcare Ready  
Washington, District of Columbia

Jimmy Patronis  
Chief Financial Officer, State of Florida  
Tallahassee, Florida

Anna Lang Ofstad  
Research Engineer and Founder, Zylient  
Kalispell, Montana

Brad Richy  
Director, Office of Emergency Management, State of Idaho  
Boise, Idaho

Carol Salas  
Director, Puerto Rico University Center for Excellence in Developmental Disabilities  
San Juan, Puerto Rico

Carrie Speranza  
Deputy Director, Homeland Security and Emergency Management Agency  
Washington, District of Columbia

Kevin Staley  
Mass Care Manager, Charlotte Mecklenburg, North Carolina Office of Emergency Management  
Charlotte, North Carolina

Tina Titze, Chair of the Expedite Disaster Assistance Subcommittee  
Director, South Dakota Office of Emergency Management  
Pierre, South Dakota

James Waskom  
Director, Louisiana Governor’s Office of Homeland Security and Emergency Preparedness  
Baton Rouge, Louisiana

Pamela Williams  
Director of Resilience and Mitigation, IEM  
Arlington, Virginia
Special Thanks to:

Dr. Cassandra Davis, Research Associate Professor, UNC Public Policy, and Program Associate Director, Institute of African American Research, for outstanding contributions made in presenting original research to the Equity Subcommittee.

Dr. Melissa Finucane, Senior Behavioral & Social Scientist, RAND Corporation, and Co-Director, RAND Resilience Center, for outstanding contributions made in presenting original research to the Equity Subcommittee.

Dr. Victoria Lawson, Research Project Director, CUNY Institute for State & Local Governance, for sitting as an outside expert on the Equity Subcommittee during 2021.

All presenters and contributors to the National Advisory Council subcommittee meetings, who’s perspectives, thinking and ideas helped to frame and shape the recommendations of the Council.

FEMA Liaisons to the National Advisory Council.

Point of Contact:

Attention – Rob Long, Designated Federal Officer to the National Advisory Council

E-mail: FEMA-NAC@fema.dhs.gov

For more information about the FEMA National Advisory Council, please visit:
https://www.fema.gov/about/offices/national-advisory-council