



FEMA

National Advisory Council

June 19, 2018

MEMORANDUM FOR: Brock Long
Administrator
Federal Emergency Management Agency

FROM: James Featherstone
Chairman
FEMA National Advisory Council

SUBJECT: Recommendations from the May 2018 NAC Meeting

The purpose of this memorandum is to forward for your consideration recommendations made by the FEMA National Advisory Council (NAC) at the May 22-24, 2018, meeting held in San Diego, California.

At this meeting, the NAC considered, deliberated, and voted on 24 recommendations related to 13 issues that include: model building codes; messaging and storytelling; Public Assistance cost estimates; and tribal nation capabilities. We believe that these recommendations support the agency's efforts to promote pre-disaster mitigation, build a culture of preparedness, simplify the provision of assistance, and ready the nation for catastrophic disasters.

I. Promoting Pre-Disaster Mitigation

Issue 1: Quantifying Mitigation Investments

FEMA seeks to implement the National Mitigation Investment Strategy by quadrupling investments in mitigation; however, it has not established a baseline level of mitigation investments.¹

Discussion

Without an established mitigation baseline, there is no way to measure an increase in the level of mitigation investment. To establish an overall mitigation investment baseline, FEMA needs to gather and quantify mitigation efforts (e.g., projects/activities) conducted at the state, local, tribal, and territorial (SLTT) levels that use funding from private and governmental sources.

To collect consistent mitigation investment data, FEMA must define mitigation specifically and create a simple tool to capture the information. FEMA can request input from states and then determine what collection methods they would prefer to use to gather the data. Some states may

¹ 2018-2022 FEMA Strategic Plan, Appendix 1: Performance Measures, Objective 1.1; page 2.

choose to use local planning districts or county emergency managers, while others may have state staff that can collect and enter the information.

Information used in establishing a baseline level of mitigation investment could also be used to:

- Determine at a federal level where mitigation funding should be directed to support preventative measures;
- Identify the amount of funding needed to complete various projects;
- Highlight and share best practices and case studies; and
- Encourage more private investment into SLTT efforts.

Establishing a baseline and tracking annual mitigation investments would also allow for annual calculations that demonstrate future savings. For example, the estimated mitigation savings of \$6 for every \$1 spent on mitigation does not account for private or SLTT mitigation efforts. A mitigation baseline and subsequent annual reporting would allow for more accurate calculations.

Recommendation 18-14: The Administrator should establish a mitigation policy that clearly defines what mitigation is and create a simple matrix tool by which states are required to gather and enter the mitigation information into a database system as a means for capturing the various project efforts to establish a baseline and utilize for on-going annual reporting for pre-disaster mitigation investments.

Issue 2: Pre-Disaster Mitigation (PDM) Project Planning

Pre-disaster mitigation grant project planning funding is not currently available or reimbursable, which may discourage or delay grant applications.

Discussion

PDM projects can be developed prior to a PDM Notice of Funding Opportunity (NOFO) and this is a practice that should be encouraged; however, some PDM project applicants are not willing to fund the upfront costs associated with project development knowing that they are not reimbursable. Currently, an applicant who proactively plans a project in anticipation of available funding is responsible for associated project development costs (e.g., design and engineering) that it incurs prior to the award. This discourages applicants from completing some of the upfront work needed to identify viable projects.

Once a NOFO is announced, applicants have 90 days to submit a project. As a result, applicants must gather all necessary information and quickly develop and engineer projects to meet the 90-day requirement. For more complex project proposals, applicants often need additional time to gather details from consultants and engineers, especially for projects that require environmental consultations. In these cases, PDM project applicants may not meet the submittal timeline. In addition, there is no standard timeframe when the 90-day application period will occur (for example, every year from October 1 to December 30), which limits a PDM project applicant's ability to plan and budget for such design development and associated costs.

The current PDM process may lead to incomplete project applications, limit the complexity of PDM projects, and limit the number of project submittals. Allowing reimbursable upfront costs if the project is later selected and funded would encourage applicants to consider these activities prior to a PDM NOFO announcement (applicants understand that projects must be approved by

the state and FEMA before any costs are eligible). In addition, establishing a consistent 90-day time frame, and considering allowing for additional time past the 90 days, would also encourage more robust and viable project submissions for consideration.

Recommendation 18-15: The Administrator should allow for grant pre-award costs associated with project development to be eligible for approved PDM projects as this will allow applicants the ability to put together viable projects prior to the NOFO. This additional time, and the assurance that these costs will be allowable if the project is approved, will encourage applicants to develop a proper scope of work, establish the necessary project details through the work of an engineer or other consultants and then submit a solid viable project.

Recommendation 18-16: The Administrator should establish a standard application period for Pre-Disaster Mitigation. This would allow states to establish clear timelines for applicants to work through the application process. Should congressional funding be approved, projects can be awarded more quickly and construction can begin sooner to make the Nation more resilient.

Issue 3: Flood Insurance Requirements

Letter of Map Amendments and Revisions may remove flood insurance purchase requirements from properties that remain at risk.

Discussion

FEMA wants to ensure communities have information and processes that, when incorporated with local requirements, protect property and property owners from flooding. Ensuring that properties within marginal risk areas remain protected with flood insurance assists homeowners, communities, and FEMA.

Letter of Map Amendments and Revisions are used to re-establish a property's relationship to the floodplain or account for the implementation of physical measures that affect the floodway; when issued, they remove the flood insurance purchase requirement from a respective property (for a federally backed loan; there are not local requirements to have a flood-insurance policy). This may inadvertently expose the property to future risk. For example:

- Following a federal risk-map update, Letter of Map Amendments and Revisions are required to be revalidated; in many cases, this does not happen.
- Risk areas change due to local development and other circumstances; however, these changes are not immediately identified on Federal flood-risk maps.
- Flood Insurance Rate Maps do not represent known future conditions, such as allowable development within riverine systems that impact future conditions (e.g., changes in volume, elevations, and conveyance).
- Flooding occurs outside of the designated Flood Insurance Rate Map Special Flood Hazard Areas and Coastal High Hazard Areas.

In support of FEMA's efforts to "close the insurance gap," this recommendation establishes a method to ensure that properties within areas of marginal flood risks are protected by insurance. Other areas that may be considered for protection within marginal risk areas include:

- The .2 percent probability flood-risk area (500-year event);
- Areas of storm surge (Level 2 evacuation or category 2 storm surge areas); and
- Areas of potential inundation from dam release, compromise, or breach.

Recommendation 18-17: The Administrator should initiate a policy change whereby a Letter of Map Amendment or Revision does not remove the flood insurance requirement for properties within marginal risk areas. The flood insurance requirement may be in the form of having a “Preferred” flood-insurance policy.

Issue 4: Model Building Codes

Not all areas in the United States adopt or enforce the latest building code editions and outdated building codes do not account for the latest hazard assessments and awareness of actual risk. In addition, the only performance object of building codes is to preserve life; codes do not offer a level of protection against damage from reasonable events.

Discussion

Model building codes establish criteria for disaster resilience, including flood protection, snow loading, wind loading, seismic protection, and fire protection. Although the safety of buildings is an SLTT responsibility, FEMA can play a significant role in increasing public awareness of the role building codes have on disaster mitigation, and increasing public support for their adoption and compliance. FEMA could also support the training and education of public policy makers and code officials and could establish incentives for SLTT jurisdictions to adopt and enforce the most recent addition of the model building codes. Jurisdictions should also be encouraged not to amend the codes and standards in ways that would lessen the level of safety.

Ideas for incentives FEMA may develop to encourage code adoption and enforcement include:

- Pre-disaster: grants for each of the following stages of code adoption at the state/local level: 1) review, 2) legislative adoption, 3) promotion, and 4) improved compliance;
- Pre-disaster: requiring the adoption of and compliance with the latest codes – *or an identified path toward adoption* – to be a component of state/local hazard mitigation plans to receive federal mitigation grants; and
- Post-disaster: incentivizing the adoption of the latest building codes in post-disaster situations.

In addition to model building codes, there are also guides that may inform SLTT decision making. The U.S. Department of Commerce National Institute of Standards and Technology (NIST) publishes documents that provide a framework and planning process that communities can use to understand the vulnerabilities they face from their built environment. NIST looks comprehensively at how to understand social and economic perspectives in terms of recovery times, determines the gaps between the need and what is available, and develops and prioritizes needed preparedness and mitigation programs.²

Recommendation 18-18: The Administrator should establish positive incentives for states, local, tribal, and territorial jurisdictions to adopt and enforce the most recent model building codes. Separate incentive programs should be established for pre- and post-disaster conditions.

Recommendation 18-19: The Administrator should establish awareness programs or education campaigns directed toward both the public and policy makers on the importance of adopting and enforcing the most recent model building codes to effectively mitigate disasters. Initiatives such

² See <https://www.nist.gov/topics/community-resilience>.

as the Coalition for Current Safety Codes (www.coalition4safety.org) could be incorporated into this effort. Separate pre- and post-disaster campaigns should be established.

Recommendation 18-20: In collaboration with NIST, the Administrator should provide technical assistance to encourage and facilitate the adoption of the NIST *Community Resilience Planning Guide for Buildings and Infrastructure Systems* and the *Community Resilience Economic Decision Guide for Buildings and Infrastructure Systems* for state, local, tribal, and territorial communities to aid their disaster mitigation planning.

Recommendation 18-21: The Administrator should require all communities to include concepts from the NIST *Community Resilience Planning Guide for Buildings and Infrastructure Systems* and the *Community Resilience Economic Decision Guide for Buildings and Infrastructure Systems* in their hazard mitigation plans and as a condition of receiving Pre-Disaster Mitigation funds (except for planning funds). Separately, the adoption of these guides should be incentivized to receive post-disaster relief funds.

Recommendation 18-22: The Administrator should jointly convene with NIST a committee of experts (from government agencies, codes and standards writing organizations, nongovernmental organizations, disaster management professional associations, and engineering professional associations) to assess and recommend options for revising or supplementing model building codes for new and existing construction to reflect performance goals stated in terms of post-disaster re-occupancy and functional recovery time (in addition to life safety).

II. Building a Culture of Preparedness

Issue 5: Messaging and Storytelling

Research shows that people remember and are moved by stories, not facts and threats.

Discussion

To create a culture of preparedness, FEMA must share information with the American public on how to prepare effectively for disasters. FEMA is and will be challenged to do this in a way that is informative, engaging, and inspiring. It will make no difference if those who see its messages are not moved to take meaningful action. In addition to looking to stories to spread preparedness messages, FEMA should use them to amplify existing work and accomplishments in creative and novel ways. Media and entertainment companies, such as YouTube, BuzzFeed, Walt Disney Company, DreamWorks, Pixar, Universal, Warner Bros., and other movie studios and advertising agencies, are master storytellers and could provide FEMA with an understanding of effective storytelling methods and feedback on creating campaigns with the ability to go viral. The following recommendations (18-23 to 18-25) are interrelated and sequential.

Recommendation 18-23: FEMA should invite creative and entertainment representatives (such as artists, filmmakers, and producers) to share expertise with FEMA staff on the following:

- a. Understanding the pillars of effective storytelling and creating viral material;
- b. Engaging the public, across various demographics, with a message that inspires them to take specific action; and
- c. Partnering with influencers to spread messages of hope (during crises), preparedness, and community building.

Recommendation 18-24: FEMA should define success before undertaking these [public messaging] campaigns. Specifically, FEMA should create or adopt metrics on the effectiveness of all its public-facing messages and report back to the NAC.

- Effectiveness can be defined as moving a person to take a desired action, creating an emergency plan, or as remembering an important piece of information or phrase.
- Engage a data analytics group to assess and analyze data on the effectiveness of these messages to change behavior.

Recommendation 18-25: FEMA should develop and create one message as a core national Preparedness campaign and provide guidance for SLTT entities to add to it with localized messaging.

- Work with private and public partnerships to deliver this message through different mediums (e.g., radio, social media, television) and partners (i.e., American Red Cross, AARP, etc.) as well as state, local, tribal, territorial communities; and
- Research its effectiveness moving the general public to take preparedness actions or remember important preparedness information.

Issue 6: Children and Schools

Children make up 25 percent of the U.S. population, but their well-being impacts 100 percent of the population; the particular needs of and issues around children must be addressed in emergency preparedness and response.

Discussion

Considerations for the particular characteristics and needs of children in emergencies and disasters are often overlooked or marginalized in planning and preparedness. However, children can be instrumental in educating and informing their parents and families and can also have a significant impact on overall response efforts. For example, parents and caregivers will not heed instructions in an emergency until they know their children are safe. Some considerations for addressing the characteristics and needs of children in planning and preparedness include:

- Using developmentally appropriate methods;
- Creating developmentally appropriate materials (e.g., vary along a continuum);
- Clearly defining objectives (e.g., do you want to prepare children to be responders, minimize anxiety, develop skills and self-efficacy, etc.); and
- Identifying mental health issues particular to developmental stages.

Ways that FEMA and the emergency management community can address the needs of children and work with schools in planning and preparedness may include:

- Working with child development experts to develop drills and exercises that address the most likely and most dangerous scenarios confronting school-aged children (presenting activities in a manner that is engaging, non-threatening, and safety oriented);
- Seeking out examples and/or best practices being employed in selected communities;
- Establishing a “menu” of techniques and practices that can be adapted to local conditions;
- Identifying best practices and performance metrics that may already be in effect in selected school districts or local jurisdictions; and
- Considering international best practices and/or performance metrics from countries that have experience in disaster response (e.g., Israel, Japan, Australia, etc.).

Recommendation 18-26: To increase awareness of the needs of children in the emergency management and first response communities, FEMA should develop disaster scenarios to include children, schools, and family units and distribute to SLTT emergency management agencies for adoption.

Recommendation 18-27: In grant guidance, templates, and/or toolkits, FEMA should incentivize programs that include children in drills with appropriate supervision.

- Work with childhood experts to develop age-appropriate drills and response actions; and
- Involve parents/caregivers.

Recommendation 18-28: FEMA should develop and track preparedness, response, and recovery metrics around children and schools before and after a disaster.

- FEMA should invite childhood experts, study designers (which can include, but are not limited to epidemiologists and biostatisticians), selected emergency managers, as well as school officials at the SLTT levels to work with FEMA to create metrics around children. Using those metrics, see how they would apply in recent disasters.
- Examples of possible metrics:
 - Preparedness: percentage of children in a community that know age-appropriate messages;
 - Response: appropriate infant food and supplies in shelters; and
 - Recovery: returning to school; indicators of psychological wellness.

Issue 7: Whole Community

The poor and homeless represent a significant portion of America's population and are not represented in FEMA's "Whole Community" model or strategic plan.

Discussion

FEMA's strategic plan references the lack of access to financial resources as a limiting factor for many Americans in their ability to cope in the aftermath of disasters. However, FEMA may still be missing an opportunity to plan *with* poor communities and homeless populations instead of *for* these communities and individuals. In addition, there are many different aspects that affects a person's economic state and their economic resilience in the face of disaster. What it means to be poor, low-income, or struggling financially in one geographic area may look and feel very different in another. The NAC recognizes that it is difficult to find one organization that speaks to the whole picture of what it means to be poor, near-poor, or just struggling financially. However, in seeking to tap into the creativity and resourcefulness of these communities FEMA may discover a great benefit of finding new no-cost and low-cost ways that Americans can prepare themselves against all hazards.

Recommendation 18-29: To receive feedback on the economic realities and adoptive feasibility of the agency's public-facing programs, FEMA should engage in its strategic planning efforts more organizations, in all FEMA regions, who represent and advocate for the poor and homeless.

III. Simplifying the Provision of Assistance

Issue 8: Eligibility ... not Engineering (Public Assistance)

FEMA staff often unreasonably question project designs submitted by Public Assistance (PA) applicants, even when designs are certified by licensed professionals.

Discussion

Once a PA applicant and FEMA agree on eligible disaster damage, the next step is to agree on the eligible scope of work to repair, replace, and/or mitigate damaged facilities. When agreeing to and validating scopes of work, FEMA reviews project designs to determine if a scope of work is eligible under the program parameters. FEMA staff too often questions design decisions rather than pure issues of eligibility, even when design plans are certified by licensed professionals. The practice of debating design decisions beyond eligibility issues can significantly delay and weaken local control over recovery. FEMA should focus on analyzing proposed designs to determine eligibility, not design decisions unrelated to eligibility.

Recommendation 18-30: The Administrator should revise Chapter 3, Section II. Project Formulation of the *Public Assistance Program and Policy Guide* to make it clear that FEMA's role is to review and validate project design eligibility only – not discretionary design decisions.

- FEMA should be able to offer suggestions to project designs based on eligibility issues, but not dictate design preferences that are unrelated to scope eligibility.
- Applicants and local professionals are best suited to determine local project design.

Issue 9: Cost Estimate Validation (Public Assistance)

FEMA often uses a process that is excessively burdensome and administratively complex when validating cost estimates submitted by PA applicants.

Discussion

PA applicants can submit cost estimates for agreed to scopes of work to repair, replace, and/or mitigate damaged facilities, and they may use industry professionals (e.g., licensed engineers, experienced cost estimators, etc.) to develop these project cost estimates.

FEMA reviews cost estimates submitted by applicants to ensure they include only eligible costs and are reasonable. To validate cost estimates, FEMA often reviews 20 to 100 percent of all cost items, which is time consuming, delays recovery, and does not necessarily provide FEMA stronger validation results. This method of validation is particularly problematic for large projects with complicated cost estimates that could include tens of thousands of cost line items. Instead, FEMA should adopt industry standard audit-based sampling techniques to validate all cost items in a given project cost estimate.

Recommendation 18-31: The Administrator should revise Chapter 3, Section II.D. of the *Public Assistance Program and Policy Guide* to:

- a. Simplify cost estimate validations consistent with generally accepted audit sampling methods (e.g., Sampling Considerations of 2 CFR Part 200, formerly Circular A-133); and
- b. Specify that applicant-submitted cost estimates are determined to be valid when sampled cost items are within 10 percent (plus or minus) of the local average baseline used by FEMA for comparison. (Note, the *FEMA Public Assistance Alternative Procedures Validation of Subgrantee*, May 20, 2013, already calls for this 10 percent threshold; it should be stipulated in policy for all of Public Assistance).

Issue 10: Appeals Ensure Objective Analysis of FEMA First Appeals (Public Assistance)

FEMA rarely overturns PA eligibility decisions on first appeal, which brings into question the impartiality of the first appeal process.

Discussion

In the PA program, when FEMA determines that work is ineligible, applicants can appeal the determination. This appeals process is authorized by Section 423 of the Stafford Act, which emphasizes that the FEMA appeals process should be based on “rules which provide for the fair and impartial consideration of appeals.” It is a costly and time consuming process for applicants to develop and file appeals and, in the PA program, the first appeal is submitted to the same FEMA Region that made the decision being appealed.

Unfortunately, because first appeals are reviewed by the same FEMA Region that rendered the decision being appealed, FEMA does not currently comply with the statutory requirement for “fair and impartial” reviews for first appeals specifically.

Recommendation 18-32: The Administrator should revise the *FEMA Recovery Directorate Manual, Public Assistance Program Appeal Procedures* to require all first appeals to be reviewed by a different FEMA Regional Administrator than the one whose Region made the original decision being appealed.

Issue 11: Overly Complex Section 428 Closeout Procedures (Public Assistance)

The process that the PA program uses to close Alternative Procedures projects (i.e., those permanent work projects authorized through section 428 of the Stafford Act) is onerous, redundant, and unnecessary.

Discussion

Upon completing eligible work, PA applicants must provide FEMA with supporting documentation for all costs claimed for reimbursement. Supporting documentation can include, but is not limited to, invoices, contracts, and timesheets. FEMA validates supporting documentation for PA project grant closeout, but often this validation entails looking at every single relevant document, rather than a more efficient and reliable audit-based sampling approach. During this closeout process, FEMA staff often review between 20 and 100 percent of all supporting documentation, which is onerous, redundant, and unnecessary, especially for fixed, capped grants (e.g., permanent work projects that use Alternative Procedures authorized through section 428 of the Stafford Act).

Recommendation 18-33: The Administrator should revise Chapter 3, Section IV.C. of the *Public Assistance Program and Policy Guide* to adopt audit-based sampling for Section 428 closeout validation.

- For Section 428 capped grants, closeout validation should be streamlined and require minimal work.
- Validation of Section 428 project documentation at closeout should mimic Improved Project³ validation.
 - FEMA would only review a small representative sample of all submitted documentation.

³ 44 CFR 206.203(d)(1)

- The applicant would only need to submit documentation to support up to the capped amount of the Section 428 Project Worksheet (PW), similar to a capped Improved Project PW.

Issue 12: Simplify Individual Assistance Declaration Factors

Recommendation 18-34: The Administrator should not implement the proposed Individual Assistance declaration criteria and should instead institute a multiple stakeholder reassessment including representatives from all levels of government and all 10 FEMA regions.

Issue 13: Tribal Emergency Management Capabilities

Tribal emergency management capabilities are limited for much of the tribal population.

Discussion

With recent changes in the Stafford Act, there is a significant need to develop robust programs throughout Indian Country. Unfortunately, there is not much known of where Tribes stand in capability development. Additionally, direct funding to develop capability is limited to a small number of tribes yearly.

In speaking with subject matter experts from FEMA and Tribal Communities that have experienced disasters using the traditional declaration process as well as the pilot guidance process for Indian Tribal Government Requests declarations, and in researching related issues, some common themes began to arise:

- There is a lack of understanding as to what the baseline data is in Indian Country;
- Tools that exist to collect data are limited in scope; and
- Limited funding could lead to a program being developed but end once the grant funding expires.

By addressing pressing needs around Tribal emergency management capabilities, FEMA can have a significant positive impact in Indian Country.

Recommendation 18-35: The Administrator should direct the Tribal Affairs Division to begin requesting a waiver from the Office of Management and Budget (OMB) to conduct a baseline capability survey throughout Indian Country.

Recommendation 18-36: The Administrator should establish mechanisms for the Federal Integration Teams to work directly with Tribes to develop pre-event capability. This process should be bi-directional so that Tribal representatives can either host FEMA staff or FEMA staff host Tribal personnel. This method will provide the opportunity for tribes with developing programs to not only understand what is needed but also why the process works in the manner it does.

Recommendation 18-37: The Administrator should develop Incident Management Assistance Teams (IMAT) consisting of Tribal emergency management subject matter experts to assist Tribes during disaster response and recovery. Current IMAT teams should also add a specific position for understanding relevant cultural concerns.

- USAR Teams or Tribal Hotshot firefighting teams could be a model for such teams.