December 10, 2018

MEMORANDUM FOR:	Brock Long Administrator Federal Emergency Management Agency
FROM:	Nim Kidd Chairman FEMA National Advisory Council
SUBJECT:	Recommendations from the November 2018 NAC Meeting

The purpose of this memorandum is to forward for your consideration recommendations made by the FEMA National Advisory Council (NAC) at its November 6-8, 2018, meeting held in Washington, DC.

At this meeting, the NAC considered, deliberated, and voted on 19 recommendations related to 17 issues that include: preparedness and resilience metrics, increasing social ties, simplifying document collection for survivors, and creating more insurance options. We believe these recommendations address the charges provided and support the agency's efforts to build a culture of preparedness, close the insurance gap, and reduce the complexity of FEMA.

The recommendations are grouped according to the objective they address from FEMA's 2018-2022 Strategic Plan. The objectives addressed herein are:

I. <u>Objective 1.2</u> – Close the Insurance Gap
II. <u>Objective 1.3</u> – Help People Prepare for Disasters
III. <u>Objective 1.4</u> – Better Learn from Past Disasters
IV. <u>Objective 3.1</u> – Streamline the Disaster Survivor and Grantee Experience, and
V. <u>Objective 3.4</u> – Strengthen Grants Management, Increase Transparency, and Improve Data Analytics

I.   **Objective 1.2 – Close the Insurance Gap**

Issue 1: Inconsistent and Inaccurate Flood Mapping
The National Flood Insurance Program (NFIP) relies on flood mapping and data that are not always uniform and can be subjective. The lack of standard results weakens FEMA's ability to assess actual flood risk for the ~22,000 communities that participate in the NFIP.

Discussion
FEMA is often criticized for a lack of transparent and objective practices in its implementation of flood mapping for NFIP purposes. Flood mapping is sometime delegated to states, locals, and contractors – which does not always produce standard results and can be inaccurate and/or biased to underrepresent risk for more limited local NFIP purchase requirements.

FEMA would be better served by partnering with a select group of external, technical partners to produce a nationally agreed-upon set of standards and a uniform approach to the creation of flood maps that are updated regularly so that FEMA is not perceived as inflating risk to increase coverage or deflating risk to minimize NFIP payouts.

In September 2017, the Department of Homeland Security (DHS) Office of Inspector General (OIG) published a report citing a lack of standards and sound management of FEMA flood maps. Mexico Beach, FL provides a recent example as well, where flooding from Hurricane Michael severely damaged numerous homes located in areas of minimal flood risk according to NFIP maps (i.e., X-Zone – 0.2% annual flood risk).

> **Recommendation 19-01:** FEMA should partner with the Whole Community (universities, insurance industry and risk modelers, NOAA/NWC, USGS, National Academies, etc.) to create a set of standards and uniform approach of identifying flood hazards and producing flood risk maps.

Issue 2: Expand Ready.gov with Risk Data Sets
One reason individuals do not take adequate preparedness actions is that they do not understand the risks they are vulnerable to.

Discussion
The public in general does not understand community hazards or their individual risks. Risk isn't being shared in a way that is easy for the average person to understand. Even if information on their risk is available, members of the public do not know where they can find it.

There is a need to consolidate forward facing information (e.g. location-based data and the ability to search by address) to the public, by partnering with various entities who have data sets such as the U.S. Geological Survey, the U.S. Army Corps, the insurance market, communities, stakeholders, researchers, universities etc. The 100-year flood risk language is confusing and does not communicate the risk effectively. There are available models to help people understand the risks and displaying these in one common place would make it easier for people to educate themselves. Seattle and Australia provide relevant examples.

Recommendation 19-02: The Administrator should encourage additional partnerships to expand Ready.gov. The expansion should include location-based data sets to allow citizens easy access to accurate, applicable and historical information about their specific threats and hazards.

Issue 3: Federal Facility Risks & Historic Data

Communities are unwilling to publicize the risks to which they are vulnerable. FEMA and its federal partners should lead by example.

Discussion

FEMA should set an example of sharing risk information. Communities don't necessarily want to put information related to local high-risk areas out to the public as it can be damaging economically.

There is a need to engage the locals so they understand the need to communicate risk. For example, federal building information could be shared and a partnership expanded to show high water landmarks to demonstrate hazards.

Recommendation 19-03: The Administrator should partner with other federal agencies to publish a view of the current risk across federally owned or managed assets and encourage additional partnerships with federal entities that demonstrate hazards (such as high watermark projects).

Issue 4: Tiered Insurance Options

Current insurance options do not meet the needs of consumers. More varied options would help close the insurance gap.

Discussion

People do not generally understand the need for flood insurance and there is a misconception of how much FEMA assistance a person will get creating a false sense of security. Tiered-level insurance policies are not marketed at low cost coverage levels. The goal is to get people to act, purchase insurance, and retain the insurance in hopes of closing the insurance gap and increasing the number of policies.

Marketing these policies to those who have no coverage will decrease the insurance gap and increase the number of policies. Marketing can be done to ensure people understand that they can buy insurance, even if they are outside the floodplain.

The policies should also have the option of monthly payments and/or automatic withdrawal payments as that is what people are used to with other bills. Various policies may allow for quicker insurance payments to families, so they can begin clean up or other basic efforts to protect their property and additional damages. This will also drive success stories and improve attitudes towards flood insurance.

Recommendation 19-04: The Administrator should explore the facilitation of tiered micro or parametric insurance for both homeowners and renters. These tiered policy

options should clearly explain their intent and limitations while explaining local, state and federal recovery responsibilities and the family role in recovery (i.e. to purchase an appropriate level of flood insurance).

Issue 5: Resiliency Tax Credit

Tax credits are an effective incentive for behavior and should be applied to disaster resilience efforts.

Discussion

Families can get tax credits for energy efficiency efforts. Developing a Resiliency Tax Credit concept like the Residential Energy Efficiency Property Credits would empower families to make a flood policy purchase (e.g. homeowners or renters) and/or do certain mitigation measures on their current home (e.g. install flood vents, sump pump, drain tiles, home elevation, etc.) to receive tax credits.

Families are also given tax credits for other expenses. Business could receive tax credits or insurance discounts when they mitigate against nuisance flooding (potentially use the Institute for Business Safety).

> **Recommendation 19-05:** The Administrator should explore and promote the concept of a state-based Resiliency Tax Credit (similar to the Residential Energy Efficiency Property Credit) for mitigation measures and the purchase of flood and potentially for fire or other insurance policies by homeowners, renters and businesses.
>
> This concept should be explored for use at the state level for feasibility for all hazard mitigation and flood policy purchases.

Issue 06: Mitigation Investment

There is not currently a way to capture local investments in mitigation, especially for those investments outside the traditional emergency management umbrella. This makes it impossible to track mitigation and much harder to incentivize it. This is a clarification of recommendation 18-14 related to the need for centralized mitigation investment documentation.

Discussion

FEMA seeks to quadruple the mitigation investment across the nation. Transparently documenting the mitigation efforts going on nationally will assist in furthering this goal. Reviewing mitigation efforts over time could lead to measurements and metrics of the efficacy of mitigation.

> **Recommendation 19-06:** FEMA should work with SLTTs and private partners to launch a portal to encourage local, state and tribal governments to upload their mitigation projects. Potential incentives might be considered for those governments documenting mitigation projects.

II.   Objective 1.3 – Help People Prepare for Disasters

Issue 7: Engaging and leveraging diverse communities requires a multi-lingual approach
Not all communities can access preparedness materials in a language or format they can understand.

Discussion
FEMA has worked to ensure American Sign Language interpretation for Public Service Announcements in some cases. This approach should be expanded to preparedness materials to ensure service for people with disabilities, access and functional needs.

> **Recommendation 19-07:** FEMA should ensure that preparedness materials are readily available for distribution and download, where appropriate, in multiple languages and alternative formats for people with disabilities and others with access and functional needs ensuring the needs of the whole community are met. This may include braille, large print, ASL, national pictograms, etc.

Issue 8: Preparedness Metrics
Engaging and leveraging diverse communities requires inclusive surveying techniques.

Discussion
Ensuring a representative group from each economic, social, and cultural population in a survey is critical to identify gaps in community preparedness. By building and incorporating a survey capability that will be intentionally inclusive of underserved, marginalized, and functional and access needs populations, FEMA will more accurately represent the whole community's level of preparedness in its National Survey.

> **Recommendation 19-08:** FEMA should reexamine the design of the National Preparedness Survey and ensure it is representative of the nation's population, including multi-lingual, underserved, under-represented, and marginalized communities.

Discussion
By exchanging survey data, SLTT emergency management associations and the FEMA Regions can work together to identify preparedness gaps and potential solutions. For instance, organizations such as the American Red Cross, Indian Health Services, and others also survey community members on topics related to emergency preparedness.

> **Recommendation 19-09:** FEMA should partner with other national organizations to conduct inclusive surveys and share preparedness survey results.

Issue 9: Building a Culture of Preparedness with Local Communities and Partners
Communities with the strongest social ties recover the fastest after natural and man-made disasters. FEMA can support local communities in building social ties in two phases of the disaster management cycle: preparedness and recovery.

Discussion
Ensuring a community can connect prior to a disaster is a critical component to building a resilient community, inspiring a culture of preparedness and finding innovative ways to replicate best practices in successful jurisdictions (e.g., local meetings and gatherings).

FEMA can enhance preparedness and resilience by encouraging disaster survivors to share their stories on social, digital, and print media for broader reach. This is an opportunity to underscore the importance of social capital and community ties.

> **Recommendation 19-10:** FEMA should work with relevant external stakeholders, such as NACo, NLC, IBHS and NAIC, to create social cohesion and groups focused on long-term recovery that enhance resiliency.

Issue 10: Leveraging Digital Communities to Expand the Culture of Preparedness
Better communication efforts could help drive preparedness activities more effectively. This is a clarification of the recommendations previously made related to preparedness messaging within recommendations 18-23, 18-24, and 18-25.

Discussion
Today's society is moving faster than ever before and social movements are increasingly stemming from social media. Working together with on-line influencers such as members of YouTube's Creators for Change, Yellow Co., Facebook, and others who are not focused on emergency response and preparedness can widen the pathways to additional audiences. Employing a regional approach to these outreach efforts will assist with ensuring preparedness for hazards which are relevant to the audiences.

Additional thoughts on this recommendation include bringing FEMA representation together with other related organizations such as the Points of Light Conference for volunteers and the Weather Channel's shows on extreme disasters.

> **Recommendation 19-11:** FEMA should engage with large scale digital communities, online influencers and other private partnerships to co-brand and echo emergency preparedness messaging.
>
> The Ad Council and Ready.gov preparedness strategy should be enhanced further by partnering with successful media outlets and non-traditional influencers, i.e. YouTube's Creators for Change, Yellow Co.

III. <u>Objective 1.4 – Better Learn from Past Disasters</u>

Issue 11: Resilience Impact Metrics
There is not an agreed upon set of data which emergency management, as a field, can use to compare the results of different projects and programs to see which are most effective.

Discussion
Without a clear definition of resilience, there is no standard by which to establish a baseline for jurisdictions to measure a community's ability to prepare, respond, and recover. While FEMA maintains some publicly available databases, these are limited in scope and utility. Controversies in emergency management (e.g. Hurricane Maria death toll) can be addressed by working alongside established researchers to develop and support data measurement methods.

Multiple opportunities exist to advance data science and technology in emergency management, in order to supplement after action reports, hot washes and 'lessons learned' compendiums that are not generalizable.

Based on the subcommittee's research, potential future inquiries could include exploring possible partnerships with NIH, CDC, NASEM, NSF and data technology firms in the private sector. This will enhance the five primary mission areas to further lessen a jurisdiction's vulnerability.

> **Recommendation 19-12:** FEMA should identify and provide their definition of "resilience" with consideration to infrastructure, assets and human needs to develop standard metrics for consistent measurement. FEMA should draw on existing resources and knowledge bases to align with current national efforts.

> **Recommendation 19-13:** The Administrator should partner with relevant organizations such as NIH, CDC, NIST, NSF, NAS, academia, and others to develop a suite of standardized metrics for disaster impacts.

> These partnerships, and the products they produce, have the dual purpose of reducing complexity and preparing for catastrophic disasters by better understanding and predicting the impacts of disasters on communities.

IV. **Objective 3.1 – Streamline the Disaster Survivor and Grantee Experience, and**
V. **Objective 3.4 – Strengthen Grants Management, Increase Transparency, and Improve Data Analytics**

Issue 12: Redundant and Inefficient Document Collection for Housing Assistance
FEMA, HUD, other federal agencies, and private entities often provide post-disaster housing assistance but there is no centralized, efficient data collection mechanism that can be used across the enterprise. Departments and Agencies need to efficiently share data collected from each household (demographic, damage assessments, structural data) to minimize the burden on the survivor.

Discussion
In a given disaster, there may be multiple forms of housing assistance including FEMA Sheltering and Temporary Essential Power (STEP) assistance, FEMA Transitional Sheltering Assistance (TSA), FEMA Individual Assistance (IA), HUD CDBG-DR assistance for permanent housing, FEMA NFIP insurance proceeds, and/or private insurance proceeds.

Without a centralized data case management information system that can be used across programs, the same documentation – such as household demographic information, proof of homeownership, damage inspection details, etc. – is collected separately by each program.

This results in considerable inefficiency in how these programs operate. Worse this inefficiency places a tremendous burden on disaster survivors trying to cope with multiple program requirements, lost documentation, and redundant requests while still reeling from disaster effects.

> **Recommendation 19-14:** FEMA should develop a pilot program case management information system to streamline data/document collection across federal agencies, private, and private non-profit entities that provide housing assistance. This pilot program could use newer technology – such as blockchain – to centrally manage case files that can be accessed by multiple entities providing disaster housing assistance. Blockchain can allow a shared ledger to be used to eliminate redundant work across federal programs with requisite security features for access rights.[1]

Issue 13: Multiple DHS Agencies, including FEMA, collect similar information from the private sector
The Department of Homeland Security as a whole, including FEMA, has multiple agencies offering similar services to private sector partners with little or no collaboration or cooperation on the information collected or coordination between agencies on the collection process.

Discussion
The private sector community appreciates the efforts by DHS to minimize risk with critical infrastructure partners. Often, the efforts of multiple agencies to collect similar information from critical infrastructure partners, or provide a similar service to them, cause confusion or lack of confidence in the agencies who reach out. Additionally, outside agencies are also reaching out to

---

[1] Section 1223 of the 2018 Disaster Recovery Reform Act calls for FEMA to study how to streamline and consolidate information collection from disaster assistance applicants by SBA, HUD, and other entities.

these same critical infrastructure partners with a similar mission including the Department of Justice, Department of Commerce, the Federal Trade Commission, and the Department of Defense. Though FEMA may not be able to impact the efforts of these outside organizations, FEMA should try to consolidate effort to streamline the number of times a facility is contacted with similar prevention or risk management programs.

> **Recommendation 19-15:** FEMA should identify those employees with "right to know" or "need to know" for PCII information and require they take the requisite training.

Issue 14: Needs of Disability Community
The needs of the disability community are negatively impacted while FEMA implements a new approach to service delivery and accommodations.

Discussion
FEMA's Office of Disability Integration and Coordination has been absent from daily collaboration to reach disaster impacted individuals who need help. This lack of participation has created significant gaps in mutual situational awareness and lifesaving and life sustaining immediate problem-solving. These include barriers to equal access for disaster impacted individuals with disabilities occurring throughout FEMA's disaster assistance programs and services. Specific barriers include difficulty receiving FEMA distributed food and water; difficulty receiving health maintenance and medical care in the most integrated setting appropriate to the individual with a disability being provided by HHS ASPR, but funded by FEMA; as well as difficulty navigating the Individual Assistance process, temporary and longer term housing assistance, disaster case management and throughout disaster recovery.

> **Recommendation 19-16:** While the new disability integration approach is implemented, FEMA should designate knowledgeable FEMA staff to work with and problem solve with the disability community responding partners in current and future response events.
>
> FEMA should integrate just-in-time training competencies regarding accommodating people with disabilities and others with access and functional needs into pre-deployment training requirements as well as easy-to-use "how to" checklists.

Issue 15: Critical Recovery Concerns with New PA Delivery Model
The new PA delivery model may be slowing overall recovery efforts.

Discussion
FEMA implemented the New Public Assistance Delivery Model for all disasters after September 12, 2017. This New Delivery Model sought to reduce the cost to the federal government of providing Public Assistance to SLTT partners and increase the standardization of the provision of such assistance.

Given the heavy administrative and regulatory burden of the PA Program, it makes sense for FEMA to find better ways to deliver it. However, in the first full year of implementation, there are mixed reviews. Some applicants are experiencing unreasonable timelines to produce

information, long delays in funding, and approved project scopes that do not align with requests – making it difficult for communities to recover.

While some applicants have praised the New PA Delivery Model, many jurisdictions report that it has been rolled out unevenly, with different elements of the Model available depending on the recovery. Specific issues reported include the following:

- a lack of transparency in project eligibility decisions leading to unwanted appeals on issues that could be resolved less formally,
- inadequate communication with FEMA Consolidated Resource Centers (CRCs) developing PWs and with Program Delivery Mangers (PDMGs) who are the liaisons between applicants and CRCs,
- unrealistic timelines to respond to requests for essential elements of information (EEIs – similar to RFIs), and
- user frustration with FEMA's new PA Grants Portal, designed to receive applicant documentation but not to replace EMMIE, which remains FEMA's system of record.

There appears to be support in FEMA for this new model, but there must be a careful and timely review of issues to allow helpful course adjustments.

Recommendation 19-17: FEMA should conduct a 1-year post-2017 Hurricane Season diagnostic to evaluate the New PA Delivery Model and seek ways to make the Model more effective.

- FEMA should solicit feedback on Model improvements from SLTTs using the New Model.
- This should include assessing the staffing, turnover, and training of the Consolidated Resource Center (CRC) staff, and Program Delivery Managers (PDMGs), to identify areas needing extra support.
- FEMA should consider options to restructure the CRCs to make document review and PW processing more efficient. This could include consistent assignment of teams within the CRC to specific regions or states, allowing specialization in local construction and disaster types.
- FEMA should provide access to the Emergency Management Mission Integrated Environment (EMMIE) external system as a standard practice for all Sub-Applicants. EMMIE external system access will allow Sub-Applicants to identify errors and to better understand the status, damages, scopes of work, eligibility determinations, costs, and attachments while FEMA works to improve the New PA Delivery Model and the PA Grants Portal user experience.

Issue 16: Obstacles Exist to Merging Hazard Mitigation Funding for the Same Project
There is no formal guidance from FEMA encouraging the integration of Section 404 and 406 funds for the same hazard mitigation SOW. This is despite the fact that FEMA policy allows the coordination of both programs.

Discussion

In many cases, the lack of guidance poses no real problem. It is common that Section 404 projects to protect undamaged public facilities are completely separate from hazard mitigation work under Section 406 on damaged infrastructure.

However, sometimes the most effective hazard mitigation measures are combined and comprehensive, addressing vulnerabilities in both damaged and undamaged public facilities. Integrating Section 404 and 406 funds is a critical way to protect vulnerable public infrastructure effectively.

Example: A public housing development has a mix of damaged and undamaged facilities after a flooding event. The most effective way to protect all facilities is to build a flood wall around the entire campus. But Section 406 funds can only be used to dry floodproof individual damaged facilities. Rather than dry floodproof individual buildings, Section 404 and 406 could be combined to pay for a single flood wall – but FEMA policy does not explain how to do this.

Despite FEMA guidance allowing coordination between these two programs, FEMA has provided no guidance on how **best** this can be accomplished including examples.

This is a problem when it is impossible to separate the Section 404 and 406 SOWs, which would be the case with a flood wall around a public housing development, and in other scenarios.

> **Recommendation 19-18:** FEMA should clarify policy and provide better guidance on how Section 404 and 406 funds can be combined in order to advertise and encourage the proposal of a single hazard mitigation SOW to be jointly paid for with Section 404 and 406 funds. FEMA should empower Regions and JFOs to do joint Sections 404 and 406 benefit-cost analyses (BCAs) to evaluate cost-effectiveness and encourage states to include these projects in their priority projects list.

Issue 17: Procurement Rules Constrain Effective and Prompt Recovery

There is no clear FEMA guidance on allowable ways to secure pre-disaster emergency work contracts, except for debris removal. As a result, localities often hastily procure emergency contracts immediately after a disaster.

Discussion

Localities should clearly understand how to position pre-disaster contracts to make response efforts more effective while still complying with federal procurement requirements. Additionally, FEMA advises localities to end emergency procurements and seek new full and open procurements as soon as the scope of work is better defined after a disaster. FEMA is not historically flexible in allowing noncompetitive procurement.

Better FEMA guidance on how to procure pre-disaster emergency work contracts compliantly would help both localities and FEMA avoid issues with emergency procurements. Moreover, federal regulations allow for noncompetitive procurements for emergency and exigency circumstances only. However, it is not always in the best interest of the locality or FEMA for the work to stop – sometimes for many months – while a new procurement is sought.

Compounding this concern is how FEMA and/or the DHS OIG can determine what it believes constitutes the emergency and exigency period without knowledge of response and recovery needs on the ground. This leads to FEMA, the DHS OIG, and other auditors to second-guess emergency/exigency designations by recovering communities.

Recommendation 19-19: FEMA should better define and standardize emergency procurement periods post-disaster to include greater flexibility for SLTTs.

These guidelines should incorporate disaster type, magnitude, and complexity in order to provide SLTTs a reasonable timeline for the use of emergency procurements. The guidance should also clarify when and why SLTTs must re-procure contracts for their emergency procurements. The guidance should take into consideration that stopping work to re-procure a contract might not be in the financial and general welfare of the community, SLTTs and federal government.

FEMA should develop specific guidance promoting and clarifying how to procure eligible pre-disaster contracts for all types of eligible emergency work -- not just debris. FEMA should also incentivize pre-disaster contracts (e.g. pre-disaster grant funding for procurement preparedness).