MEMORANDUM FOR: W. Nim Kidd  
Chairman, National Advisory Council  

FROM: Deanne Criswell  
Administrator  

SUBJECT: Response to National Advisory Council (NAC) Report  
Recommendations to the FEMA Administrator, November 2020  

October 15, 2021

This memorandum outlines the FEMA responses to the November 30, 2020, recommendations from the “National Advisory Council Report to the FEMA Administrator.” I appreciate NAC efforts to advise the agency on important issues faced by the emergency management community, particularly in light of the considerable challenges we all face from the COVID-19 pandemic.

FEMA pursues a comprehensive approach to advancing equity as a critical and foundational part of our mission. Our relationship with the NAC, emergency management, and community organizations throughout the country, will assist FEMA in identifying the best way to provide timely assistance to those who need it most. We are wholly invested in continuing to evaluate and strengthen the programs and resources that we deliver.

FEMA is committed to implementing the President’s recent executive actions to assess and address gaps in investment in underserved communities and eliminating barriers to accessing FEMA programs. In addition, and in the spirit of those executive actions, FEMA grant-making programs conduct in-depth assessments to evaluate how program access can be made easier and more equitable. We seek direct stakeholder feedback from underserved communities. Across the agency, FEMA focuses on providing more resources, training, and forums for public engagement while working to enhance diversity and inclusion in our workforce.

We are also committed to investing in data analytics and tools to measure social vulnerability and risk to communities more accurately. FEMA will apply analytics to develop more targeted and tailored approaches to preparedness, mitigation, response, and recovery. With your help and partnership, FEMA will continue to make data-driven decisions across the enterprise based in science and evidence.

Please find FEMA responses to a subset of 2020 NAC Recommendations selected for immediate answer in Appendix A of this document. While the appendix focuses on a subset of recommendations, we will continue to consider all recommendations as my team builds out FEMA strategies for implementing the “2022-2026 FEMA Strategic Plan” and creates a shared vision for the future of emergency management.

www.fema.gov
cc: Alex Amparo, Senior Official Performing the Duties of Deputy Administrator for Resilience
    David Bibo, Associate Administrator (A), Office of Response and Recovery
    Traci Clever, Associate Administrator, Mission Support
    Michael Coen, Chief of Staff
    Justin Knighten, Director, Office of External Affairs
    Cynthia Spishak, Associate Administrator, Office of Policy and Program Analysis
    Jo Linda Johnson, Director, Office of Equal Rights
APPENDIX A: Responses to Select 2020 NAC Recommendations

<table>
<thead>
<tr>
<th>Focus on Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>01 Create an Equity Standard</td>
</tr>
</tbody>
</table>

On December 1, 2020, then-Administrator Gaynor delivered the NAC 2021 Charges, which included a request to, “Create a standard which FEMA can use to evaluate its programs to ensure they achieve equitable outcomes.” FEMA program offices and liaisons to the NAC are actively working with the NAC Equity Standard Subcommittee, providing information and assistance in fulfilling this charge. FEMA looks forward to receiving the resulting recommendations in the NAC 2021 Report.

FEMA will develop a comprehensive approach to advancing equity using the requirements of Executive Order (EO) 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, issued on January 20, 2021. These include:

- Conducting an equity and barrier assessment to review programs and policies to evaluate how underserved communities and their members face systemic challenges to full and equal participation in enrolling in, or accessing programs, benefits, and services, including taking advantage of procurement and contracting opportunities. These assessments are ongoing and a plan to address any issues identified in the assessments will be developed by the one-year deadline set forth in the EO;
- Determining if new or updated policies, regulations, or guidance documents are necessary to advance equity in agency actions and programs;
- Reviewing strategies of resource allocation to increase investments that advance equity in underserved communities;
- Consulting with members of historically underrepresented and underserved communities to evaluate opportunities and develop approaches to advancing equity by increasing coordination, communication, and engagement with community-based and civil rights organizations; and
- Studying FEMA data collection programs, policies, and infrastructure, identifying any deficiencies, and working to implement actions that expand and refine data used to measure equity.

FEMA stood up an Equity Enterprise Steering Group (ESG), which has created a definition of equity for FEMA, as well as a guiding principle, for programs to use when conducting self-evaluations. The FEMA definition, which is aligned to EO 13985, is “the consistent and systematic fair, just, and impartial treatment of all individuals.” FEMA’s overarching equity principle, as aligned to the agency’s mission statement, is “Ensuring all people are helped before, during, and after disasters.”

02 Direct Mitigation and Preparedness Funds to Improve Equity in Outcomes

FEMA is undertaking an assessment of equity outcomes of several mitigation, federal insurance, preparedness, and grant programs. Based on the NAC recommendations and other inputs, efforts to improve equity outcomes will include, but are not limited to:

- Leveraging a multi-pronged approach to assess the equity of the FEMA Hazard Mitigation Assistance (HMA) grant programs: first, use data analysis to set program
metrics and determine a baseline; second, explore contextual and procedural inequities impacting applications through research; third, evaluate existing approaches to advance equity; and fourth, focus on external engagements to better understand needs of underserved communities.

- Implementing the actions required of the Justice40 Initiative for programs delivered across FEMA, advancing the Biden Administration’s whole-of-government approach to environmental justice. This is to meet the goal that 40 percent of the overall benefits from Federal investments in climate and clean energy go to disadvantaged communities.
- Exploring how to make the structures and processes around the distribution of mitigation grant funds more equitable; for example, incorporating revised criteria in Notice of Funding Opportunities (NOFOs).
- Highlighting cross-cutting principles to, “Deliver our programs with equity to increase resilience of all communities”, and to “Assess, evaluate, and prioritize the needs of underserved communities in a post-disaster environment,” as stated in the HMA Strategic Framework for Fiscal Year (FY) 22-23.
- Engaging with State, Local, Tribal, and Territorial (SLTT) partners by discussing key elements of the new Building Resilient Infrastructure and Communities (BRIC) program, providing a grant program and funding priority overview, preparing underserved applicants to apply, and publishing the Mitigation Action Portfolio, a new resource to introduce stakeholders to the BRIC grant program and the array of eligible hazard mitigation activities.
- Undertaking an equity initiative in the Office of the Flood Insurance Advocate to understand barriers faced by historically underserved populations in accessing the resources of the National Flood Insurance Program (NFIP). In addition to SLTT partners and community stakeholders, this initiative includes meeting directly with underserved populations to understand their perspective and gain a more complete understanding of existing barriers.
- Expanding Grant Programs Directorate (GPD) use of a social vulnerability index with existing data sets, and identifying other data elements that consider equity outcomes, where possible. Each preparedness grant program will require detailed analysis to determine how to best assess existing program requirements and their impact on equity.

GPD will explore information regarding culturally, economically, and socially at-risk communities, by analyzing program portfolios to identify efforts to address equity that are already underway within the Agency. Then, it will identify programs with existing flexibility in purpose, scope, and priorities within their statutory authority. And finally, FEMA will consider policy recommendations that better align funding distribution to support at-risk communities. For instance, GPD is currently designing an equity assessment of the Non-profit Security Grant Program (NSGP); which provides physical and other security enhancements for 501(c)3 nonprofit organizations (as defined by the U.S. Internal Revenue Service) at high risk of a terrorist attack based on their ideology, beliefs or mission. To provide for the security and needs of underserved and historically marginalized communities more effectively, the assessment will investigate barriers to program participation including program awareness, ease of application, eligibility, and qualification requirements, and as well as identifying where funding has not been previously awarded.
FEMA is also considering changes to the Threat Hazard Identification and Risk Assessment (THIRA) and the Stakeholder Preparedness Review (SPR) to capture vulnerabilities, capability gaps, and target levels of capability for at-risk communities and ensure equitable funding distribution related to planning, preparedness, mitigation, and recovery outcomes.

<table>
<thead>
<tr>
<th>03</th>
<th>Improve Cultural Awareness in Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FEMA will create a program for all employees, including leadership, that aims to thread the concept of cultural humility into the workforce. This will ultimately guide more informed and effective disaster policies that do not exclude or minimize any demographic or section of a community.</strong></td>
<td></td>
</tr>
</tbody>
</table>

Specifically, FEMA will:
- Conduct a review and testing of currently offered FEMA employee trainings to determine their effectiveness of developing cultural competence and awareness of unconscious bias. If findings conclude that trainings do not meet objectives to increase employee knowledge and development in cultural differences, cultural humility, and unconscious bias, FEMA will develop and deliver an improved ongoing interactive learning program.
- Ensure that program training objectives are incorporated into job expectations, which will be used to measure training impact. FEMA will create performance metrics to assess effectiveness and impacts through internal assessments and external feedback.
- Complete the ongoing review and analysis of higher-performing offices to share best practices in management.
- Reinforce pre-deployment training for FEMA employees to gain knowledge in the specific vulnerabilities of the communities they will encounter and to acknowledge and reduce biases. FEMA employees will receive ongoing and continuing education through their career.
- Training for each employee will include the following courses: Civil Rights and FEMA Disaster Assistance; Diversity Awareness Course; Including People with Disabilities and Others with Access and Functional Needs in Disaster Operations; and Building Partnerships with Tribal Governments.

Furthermore, the FEMA Intergovernmental Affairs (IGA) Tribal Partner Team is developing a training plan for internal staff to better understand tribal nations’ government structures, heritage, and culture.

<table>
<thead>
<tr>
<th>04</th>
<th>Ensure the FEMA Workforce Reflects the Population it Serves</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The FEMA Recruitment Team will continue to broaden our broadcast of job opportunities to affinity groups representing minority segments of the Nation’s population. We also are expanding our outreach, recruitment, and hiring engagement efforts with organizations that represent diverse populations and have a recruitment strategy that has a strong focus in these areas. FEMA also maintains hiring goals, as required by Department of Homeland Security (DHS), to ensure opportunities for veterans and people with disabilities to further achieve diversity among our workforce. During the hiring process, FEMA guidance documents require that hiring panels be diverse to the greatest extent possible, and leadership prioritizes and</strong></td>
<td></td>
</tr>
</tbody>
</table>
communicates the benefits of diversity. The agency is also currently exploring entry into Memorandums of Understandings (MOUs) with minority serving institutions like Historically Black Colleges and Universities (HBCUs).

Additionally, the FEMA National Preparedness Directorate (NPD) with FEMA Region IV sponsored a meeting in September 2021 to discuss efforts to build and sustain emergency management programs at HBCUs. Senior officials from several HBCUs and offices across FEMA and DHS will participate to support on-going outreach and hiring engagement.

<table>
<thead>
<tr>
<th>05</th>
<th>Measure Social Capital and Work to Increase It</th>
</tr>
</thead>
</table>

FEMA recognizes the importance of social capital to promote positive outcomes for disaster recovery, and that social capital can improve equity in community disaster preparedness, resilience, and recovery. During 2021, FEMA Resilience, the Office of Equal Rights, the Community Planning and Capacity Building Recovery Support Function (CPCB RSF), and other FEMA components are meeting to evaluate existing initiatives and metrics for social capital and draft an executive summary of this evaluation for the FEMA Administrator by the end of 2021. The CPCB RSF will be evaluating its analytic tools’ efficacy in response to late 2021 disasters and adjusting deployment and metrics in CY 2022 based on its findings. The CPCB community analysis tool, expected to be completed by mid-2022, will provide analyses of post-disaster community capacity, vulnerability, and impact issues to help inform CPCB RSF mission scoping and field delivery. CPCB RSF will share these analyses routinely with other FEMA programs and federal RSF agencies to help them inform post-disaster decision making. FEMA Recovery will update the Community Recovery Management Toolkit and associated trainings by the third quarter of 2022 to ensure resources for building social capital are included.

Through 2023, NPD’s Individual and Community Preparedness Division is working to measure and increase social capital in the following areas -

**Preparedness Actions:**
- Convene interagency, academic, and philanthropic partners to review and update protective actions guidance for key hazards.
- Lead the DHS efforts for the Learning Agenda Question #18, “How do individuals’ preparedness behaviors change over time?”
- Continue the implementation of the OMB approved the Individual and Community Preparedness Division (ICPD) Evaluation Plan to document a baseline assessment of ICPD activity, assess the effectiveness of individual and community preparedness ICPD programs and begin to investigate the individual and community preparedness return on investment.

**Capacity Building:**
- Utilize the Organizations Preparing for Emergency Needs (OPEN) training to help underserved communities become resilient ahead of disasters while address the planning needed to start their recovery.

**Youth Preparedness:**
- Increase deliveries of the revised Student Tools for Emergency Planning (STEP) and IS-36 Preparedness for Child Care Providers courses.

**Citizen Responder:**
• Educate volunteers, in multiple languages, about disaster preparedness for the hazards that may impact their area and train them in basic disaster response skills through in-person, online, and virtual trainings.

• Continue work across the FEMA enterprise to improve outcomes for disaster survivors, including collaboration with the NPD’s National Integration Center (NIC) on integrating Community Emergency Response Teams (CERT) into the OneResponder personnel resource management system.

Transition the Financial Resilience Portfolio to focus on inclusive Personal Resilience:

• Deliver data driven programming that builds emotional, financial, physical, and social resilience that is inclusive and low cost.

• Expand and capitalize, per the FY21 DHS Appropriations bill, on the capabilities and programming of other federal agencies including the members of the Financial Literacy Education Commission (FLEC).

• Increase the uptake and usage of the Emergency Financial Assistance Kit (EFFAK) with a focus on expanding the delivery of the kit to underserved communities.

The NPD ICPD is working to increase social capital by establishing a foundational understanding of Social Return on Investment (SROI). SROI is a systematic means of incorporating social, environmental, and economic values into decision-making processes. This research will guide how SROI can be applied to disaster preparedness and resilience programming decision-making.

ICPD also curates the Emergency Management Institute (EMI) course, “Building a Roadmap to Resilience, a Whole Community Approach” (EMI code E/L426) that covers the concept of social capital and how to leverage social capital to create more resilient communities. This stakeholder course explores research linking social capital to community resilience, the common motivations and barriers to preparing for disasters, the development of strategies to leverage collaborative structures, and strategic planning to implement resilience-building initiatives into the student's community.

The FEMA Community Engagement and Risk Communication (CERC) is another example of current efforts to augment existing social capital. CERC improves outcomes and impacts by leveraging behavioral science concepts and resources to:

• Effectively communicate and engage with stakeholders on risk education and risk reduction;

• Unify messaging to encourage pre-disaster mitigation actions and post-disaster decision making;

• Deliver strategies to increase comprehensive risk awareness and cultivate high value partnerships to empower our partners;

• Create public demand for risk education and risk reduction while empowering stakeholders and partners to meet that demand and drive action; and

• Effectively identify and replicate partnership best practices, shared resources, and products across the ten FEMA Regions.

Additionally, the Resilient Nation Partnership Network (RNPN), a platform organized by FEMA for over 500 diverse organizations to exchange ideas, collaborate, and advance resilience through cross-sector partnerships, is actively increasing social capital. In 2021 the
RNPN released the co-developed “Building Alliances for Equitable Resilience” resource. RNPN continues to collaboratively pursue important topics such as using environmental, social, and governance criteria for resilience investments, accessibility, and resilience through strengthening a community’s social fabric.

Finally, during the fall of 2020, FEMA’s Office of Equal Rights coordinated and hosted three civil rights summits for external stakeholders. Motivated by FEMA’s core values of compassion, fairness, integrity and respect, the civil rights summits sought to engage FEMA and its stakeholders in collaborative dialogue aimed at identifying actual and perceived biases impacting equal access to FEMA’s programs and services. The goal of the summits was to start a conversation about equity, equal access, and implementation with members of the public with first-hand knowledge about how FEMA can better meet the needs of underserved and historically marginalized communities before, during, and after disasters. The summits focused on three areas: multi-cultural communities, disability communities, and environmental justice issues throughout disasters. The sessions included presentations from the main FEMA program offices that serve survivors and senior level panel discussions stemming from questions presented by attendees.

<table>
<thead>
<tr>
<th>07</th>
<th>Understand Emergency Management Capacity in Tribal Nations</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEMA recognizes the benefits of having a thorough understanding of tribal nation resilience and capacity. Tribal nations represent a unique and important part of the emergency management system and are responsible for managing millions of acres of land throughout the country. Completing a baseline study of tribal capacity and capability can help better align FEMA and tribal resources. Such a tribal assessment will identify technical focus areas related to planning, organization, equipment, training, and exercises. The FEMA Administrator has identified this task as long overdue, and it is included as one of the tasks in the draft National Tribal Strategy. Once completed the overview of current tribal needs and capabilities in the field of emergency management will assist FEMA better tailor training and technical assistance. This will also support better FEMA programming and resource allocation.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Focus on Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>08</td>
</tr>
<tr>
<td>FEMA has several new and ongoing initiatives that seek to introduce, promulgate, or update data-driven risk understanding and models that are accessible to SLTT and federal partners:</td>
</tr>
<tr>
<td>- Launched in November 2020, the same month the NAC 2020 Report was released, the FEMA National Risk Index (NRI) is a new, online mapping application that uses data-driven risk models to make it easier for communities to prioritize efforts to increase their resilience. NRI identifies communities most at-risk from 18 natural hazards. The application illustrates how communities may be affected by these natural hazards and how specific factors such as social vulnerability, expected annual losses, and community resilience affect those risks. Stakeholder recommended improvements will be incorporated to meet needs of communities.</td>
</tr>
<tr>
<td>- Updated in April 2021, the Resilience Analysis and Planning Tool (RAPT) is a geographic information system web map tool. Publicly available at <a href="https://www.fema.gov/rapt">https://www.fema.gov/rapt</a>, the RAPT includes selectable layers of community</td>
</tr>
</tbody>
</table>
resilience indicators, infrastructure locations, and hazard data, as well as widgets to help with analysis, including a population counter. This provides SLTT jurisdictions the ability to visualize and analyze large datasets to promote informed decision making.

- The FEMA Federal Insurance and Mitigation Administration (FIMA) FY21-23 Strategy includes an objective to, “Integrate Disaster Risk and Mitigation into Community Planning Processes.” A focus is on how community planning and data driven SLTT decision-making processes are integral to the delivery of all FIMA programs.
- The FIMA RMD Customer Experience (CX) Strategy aims to better understand customer interactions and identify how FEMA can make customer experience improving changes to program delivery. As part of this CX Strategy, FEMA aims to deliver multi-hazard risk data that is understandable, relevant, and accessible to all stakeholders, and to tailor risk products that inspire actions based on financial sense and science.
- The FEMA Risk Rating 2.0 - Equity in Action (RR 2.0) improves risk data sharing and puts equity into actions to transform the NFIP. RR 2.0 fundamentally changes how FEMA rates a property’s flood risk and delivers rates that are actuarily sound, equitable, easier to understand and better reflect a property’s flood risk. RR 2.0 incorporates a broader range of flood frequencies, and pairs state-of-the-art industry technology with the NFIP mapping data to establish a new risk-informed rating plan.
- Launched in 2020, the publicly available Geospatial Resource Center brings together nearly 1000 curated authoritative data sets, applications, and items from our federal, state and local partners in one place on ArcGIS Online. This includes hazard-specific pages, eight data catalogs, and predictive models to help communities understand their risks. These catalogs include the ability to sort content, providing a foundation for incorporating newly available authoritative data, maps, and applications.

At the federal level, FEMA is strengthening interagency data-sharing to support improved modeling and information sharing. Through the Interagency Data Coordination and Integrated Water Resources Framework, the U.S. Army Corps of Engineers, U.S. Geological Survey, National Oceanic and Atmospheric Administration, and FEMA have formalized sharing data through the Integrated Water Resources and Services Memorandum of Understanding. Priorities include the sharing of national and regional-scale water resources data and information, and the development of an integrated water resources framework.

| 09 | Use a Streamlined Funding Approach that Aligns to Mission Goals |

FEMA is working to reduce complexity and ease access to programs through internal reviews and coordination with partners. The intended outcome is to build SLTT capacity with less administrative burden. For example, the FIMA HMA Division is following a three-fold approach:

- During FY21, the National Mitigation Investment Strategy Implementation Team of the Mitigation Framework Leadership Group, led by FEMA, is proposing the creation of a mitigation program resource portal; this is also included in the FEMA 2021 Annual Planning Guidance Roadmap.
- The Hazard Mitigation Grant Program (HMGP) Team engaged an SLTT stakeholder working group to obtain feedback on the strategic direction of the program. HMGP also leveraged feedback on the BRIC program to glean further insights.
• Utilizing insights, FIMA is refining HMGP strategic goals, including to reduce complexity, increase access to funding, and improve compliance with program requirements, through consistent guidance and program support, reducing administrative burden, and improving the grants lifecycle.

Furthermore, GPD has undertaken a comprehensive approach to stakeholder engagement to enhance and streamline both the overarching frameworks and Notices of Funding Opportunity (NOFOs) for the suite of preparedness grant programs. GPD held numerous engagement sessions with external and government partners to solicit feedback on ways to clarify and simplify the program guidance and application process, including ways to reach stakeholder groups that historically have not applied. As part of the comprehensive approach, GPD is developing a FY2022 Outreach Strategy. GPD will continue this feedback process and cycle in future years.

11 Train Emergency Managers to Educate Leaders

FEMA is fully committed to continuing to develop new approaches to expand and deepen our outreach with all elected officials and political leaders. FEMA agrees that it is challenging to provide busy elected officials with the critical information needed for leadership decisions in a manner that is easy to understand and access. FEMA currently has several programs to directly educate leaders:

• The EMI provides the National Emergency Management Executive Academy, which offers a dynamic curriculum to develop strategic and policy-level executive leadership.
• The Center for Homeland Defense and Security provides the Executive Leaders Program, which offers a unique educational opportunity for senior-level homeland security/public safety leaders who are at the forefront of the Nation’s homeland security mission.
• The FEMA Congressional and IGA Team works with components across the agency and in field offices to conduct proactive outreach and education with elected officials and political leadership at all levels of government.

New approaches such as half-day seminars and consulting that focus on must-know topics including disaster cost recovery, public policy, and legal considerations are potential solutions that can be considered.

Focus on Coordination

23 Better Use Mutual Aid and Shared Resources

In 2021, FEMA deployed the National Resource Hub. The Hub leverages the Resource Typing Library Tool, OneResponder and the Incident Response Inventory System to assist SLTT governments with all aspects of shared resources. As FEMA continues to encourage mutual aid agreements, the Hub can assist SLTT governments in building effective agreements with their partners. By summer 2022, the Hub is planned to incorporate a cloud-hosted Incident Response Inventory System and the ability to connect to the Hub via application programming interfaces (API).
Furthermore, FEMA is improving the effectiveness of national mutual aid by supporting SLTT partners with the development and implementation of National Qualification System (NQS). NQS supports mutual aid operations by setting the foundational guidelines on the qualification of personnel resources within the National Incident Management System. OneResponder, the web-based NQS application available in the National Resource Hub, links SLTT, insular areas, federal agencies, non-governmental organizations, and selected industry and private sector partners.

**Focus on What Works**

<table>
<thead>
<tr>
<th>24</th>
<th>Expand FEMA Lifelines to Include Cascading Effects</th>
</tr>
</thead>
</table>

The FEMA Response Directorate is facilitating maturation of the Community Lifelines construct, which applies to the entire preparedness cycle. Through partner collaboration, we continue to establish a holistic approach, improve our capabilities, and reduce the nation’s vulnerabilities to the destabilization of community lifelines. The Response Directorate will present future options to senior leadership this year.

FEMA is also undertaking a review of all the emergency management doctrinal constructs, including but not limited to Community Lifelines, Core Capabilities, and National Critical Functions. FEMA has partnered with the RAND Corporation’s Homeland Security Operational Analysis Center to conduct the study and will ensure SLTT feedback is solicited and incorporated.

<table>
<thead>
<tr>
<th>24a</th>
<th>Establish an Interactive, Intuitive, Consequence Management Tool for SLTT Stakeholders to Identify Their Lifeline and Cascading Disaster Vulnerabilities</th>
</tr>
</thead>
</table>

The Community Lifelines construct was formalized into the latest update to the National Response Framework (4th edition), ensuring that all levels of emergency management may begin to use the community lifelines construct for all response purposes. FEMA will continue to engage with SLTT partners to further mature the lifelines construct and take under advisement these recommendations for tool development.

<table>
<thead>
<tr>
<th>24b</th>
<th>Train for Consequence Management and Cascading Impacts</th>
</tr>
</thead>
</table>

FEMA commits to making progress on this issue. Currently available training and education programs at the EMI address the concept of complex incidents and cascading events. FEMA intends to clearly associate cascading impacts with Community Lifelines through learning objectives to evolve our current curriculum development process.

The NAC requested additional elements, including the integration of public and private sectors and prevention of cascading events and disruptive risk that arise from connectivity of critical infrastructure. These match our perspective on the complexities that SLTT communities face and underscore the need for an integrated approach. Future reviews and updates to curriculum offered by the NPD training and education enterprise will include a focus on the consequence management and cascading impacts of lifeline failures.
24c Address Cascading Impacts of a Cyber Attack

FEMA agrees that additional planning and review of threats and risks from a cyber-attack is needed. While FEMA has responsibilities for the consequence management of physical impacts from cyber-attack, the primary responsibilities for cyber threat assessments, planning, and response are led by the DHS Cybersecurity and Infrastructure Security Agency (CISA). FEMA will continue to work with CISA on risk assessments and cascading impacts to analyze the physical impacts of a cyber incident on community lifelines. FEMA is also supporting efforts to prepare SLTTs for cyber-attacks, through training, exercises, and grants.

Cybersecurity is a continued focus of the FEMA National Exercise Division and is identified as a Principals’ Strategic Priority for the 2021-2022 National Exercise Program Cycle. Exercises conducted in alignment with this priority focus on:
- Coordination among all levels of government and the private sector;
- Testing or developing cybersecurity plans; and
- Ensuring SLTT jurisdictions and affected entities know what resources are available in the event of a significant cyber incident.

Exercise-specific objectives may include:
- Identifying and detecting cyber threats (advanced or persistent);
- Leveraging available prevention, protection, and response mission area authorities;
- Coordinating cyber response activities;
- Sharing timely and actionable intelligence about potential threats or emerging incidents with all relevant stakeholders, including the private sector;
- Informing the public about risks associated with a significant cyber incident; and
- Examining the effectiveness of recovery plans and procedures.

FEMA provides online and residential training to homeland security officials, emergency managers, and first responders to prepare for cyber and counterterrorism. Through training partners such as the National Cybersecurity Preparedness Consortium, residential and online courses focus on promoting community cybersecurity, cyber law, network assurance, digital forensics, information security, cyber ethics, software security, cyber exercises, and cyber incident response.

FEMA also provides preparedness grants to SLTT for cybersecurity. Under the FY21 Homeland Security Grant Program recipients must allocate at least 7.5% of funding toward cybersecurity. These funds can be used for training, exercises, planning, personnel, and equipment to prepare for acts of terrorism and cyber events.

24d Improve Public and Private Sector Coordination on Critical Lifelines

Launched at the end of the 2019 hurricane season, Emergency Support Function (ESF) #14 - Cross-Sector Business and Infrastructure, has rapidly matured due to a sustained response to the COVID-19 pandemic along with industry partners. As the FEMA component leading ESF #14, the Office of Business, Industry and Infrastructure Integration (OB3I) will promulgate processes and requirements to integrate industry partners and community lifeline infrastructure owners and operators before, during and after disasters. Through OB3I Operational Guidance, FEMA is gaining consistency in approaching the private sector.
OB3I will continue to seek insights into industry operations and capabilities for more effective alignment through:

- Developing sustained economic data and analytic capabilities;
- Improved industry coordination of planning, training, exercises, and operations, to create guidance for cultivating private public partnerships and Business Emergency Operations Centers at the state level;
- Developing an ESF#14 Field Cadre; and
- Creating ESF#14 training and qualification task books by 2023.

### 25a Create an Expeditionary Entrepreneurial Team for Innovation

The FEMA Continuous Improvement Program (CIP) deploys staff during declared major disasters to evaluate areas for improvement as well as best practices in disaster response and recovery. For example, during the COVID-19 Vaccine Mission, the CIP deployed staff to the federal Community Vaccination Centers pilot sites to support real-time identification of more effective or efficient processes, and to share those with operations nationwide. CIP is evaluating how to apply this construct more broadly during major disasters to rapidly integrate innovations.

Additionally, the FEMA Office of Chief Technology Officer (OCTO) continually identifies innovative approaches as new technologies emerge. OCTO’s approach is to evaluate innovative IT capabilities, services, and product offerings to catalyze change, enhance resilience of IT capabilities, and collaborate with federal and SLTT partners, such as:

- Actively working with U.S. Department of Defense to evaluate interagency use of secure collaboration tools to support response operations;
- Engaging in new technology pilots to determine effectiveness and value to the mission;
- Hosting regular engagements with industry partners to capitalize on new technologies;
- Hosting three Technology Exchange Days in 2021, with representation from across the Agency to stimulate thinking, share information, and drive program budget and execution planning to digitally enable the FEMA mission; and
- Collaborating with mission partners such as the Office of the Chief Procurement Officer to apply innovative business solutions that can best procure mission needs.

FEMA Regional Offices play a significant role in propagating innovation. For example, Regions VIII and I are experimenting with Regional Innovation Officer (RINO) positions. In Region VIII, within the first six months the RINO:

- Established the Region VIII Public-Private Partnership Fusion Cell to address unprecedented challenges during the COVID-19 pandemic response;
- Piloted the Hacking for Homeland Security (H4HS) program which partners FEMA and other DHS components with universities to run a course where students use entrepreneurship methods to address challenging problems faced by DHS stakeholders and expose students to federal service with DHS; and
- Built and leveraged an innovation ecosystem network that consists of industry leaders in technology and disaster response and federal innovation organizations across the federal government.
As FEMA takes this recommendation under advisement, know that FEMA CIP, OCTO, and Regional Offices are current examples of FEMA investing in improvement through innovation of processes and technological approaches, solving difficult emergency management challenges.