



FEMA National Advisory Council Preliminary Damage Assessment Advisory Panel

FINAL REPORT
December 2024

Dear FEMA Administrator Deanne Criswell,

On behalf of the FEMA National Advisory Council (NAC), it is our pleasure to present the report on recommendations adopted by the NAC from the Preliminary Damage Assessment (PDA) Advisory Panel. Pursuant to the James Inhofe National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2023 (P.L. 117-223), you convened this advisory panel under the purview of the NAC and tasked the group with assisting FEMA in improving critical components of the preliminary damage assessment (PDA) process.

Over a 10-month period, the thirteen (13) volunteer members of the advisory panel worked diligently to evaluate the strengths and weaknesses of the existing PDA process. They received input from state, local, territorial, and tribal (SLTT) emergency managers and other key stakeholders. Special thanks to NAC member Lori Hodges for expertly guiding the advisory panel from start through finish.

The PDA Advisory Panel focused on four (4) important topics: establishing a training regime that ensures consistent PDAs; using a common technology platform to integrate data from FEMA and SLTT governments; enhancing the PDA instructional materials that guide the work of SLTTs; and streamlining the PDA process. Within these topics, they crafted a series of ten (10) recommendations that have been vetted and approved at the NAC Deliberations and Voting Public Meeting in September 2024.

We are confident that the adoption of these recommendations by FEMA will result in a Preliminary Damage Assessment process that is more equitable, more consistent, and more responsive to the urgent needs of the victims and survivors of disasters. The partnership between FEMA and SLTTs will be strengthened and the path to economic recovery in disaster areas will be less prone to bureaucratic delays.

Sincerely,

Carrie Speranza

NAC Chair, 2024

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Donald P. Bliss

NAC Chair, 2025



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Executive Summary

On December 23, 2022, the James Inhofe National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2023 (P.L. 117-223) became law directing the Administrator of the Federal Emergency Management Agency (FEMA) to convene an advisory panel to assist the Agency in improving critical components of the preliminary damage assessment (PDA) process. The law tasks the panel with considering four specific topics:

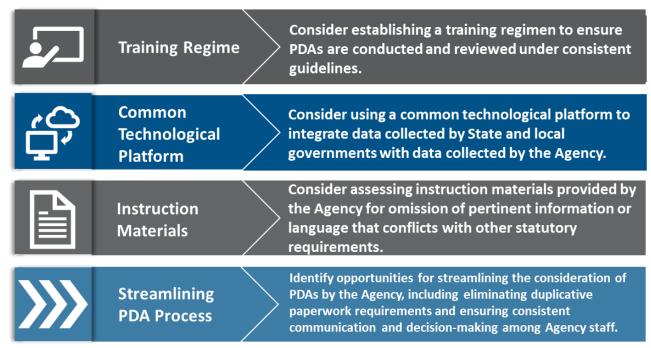


Figure 1. PDA Advisory Panel Charges

The FEMA Administrator convened the Preliminary Damage Assessment Advisory Panel (PDAAP) as a subcommittee under FEMA's National Advisory Council (NAC). The panel commenced meetings in January 2024 and, on September 25, 2024, presented ten recommendations to the NAC for approval. The NAC approved all ten recommendations included in this final PDAAP report. The report outlines these recommendations by delivering problem statements, research, and supplemental information.



PDAAP Recommendations

Recommendation 2024-01: Tiered Model of Training

FEMA should design a tiered model of PDA training to focus on realistic simulation of state, local, tribal, and territorial (SLTT) and non-governmental interagency coordination. This should include providing training on tools and technology to assist in data collection.

Recommendation 2024-02: Training Accessibility

FEMA should expand their current training model to reduce barriers and improve accessibility by developing and enhancing Train-the-Trainer courses, webinars, virtual options, Just-in-Time training, YouTube videos, and more for the PDA process.

Recommendation 2024-03: Common Processes and Minimum Requirements

FEMA should establish minimum and uniform system parameters and data requirements that any jurisdiction can use to collect and transfer damage information without creating or mandating one common platform that all jurisdictions must purchase or access.

Recommendation 2024-04: Big Data

FEMA should ensure all regions can ingest large amounts of SLTT damage assessment data through a FEMA hosted common file sharing and storage tool (e.g., Google, Dropbox). Additionally, FEMA should provide minimum system requirements and configuration guidance to ensure compatibility between SLTT damage assessment platforms and FEMA's file sharing tool.

Recommendation 2024-05: Job Aids

FEMA should enhance their technical assistance to SLTT partners by developing quick guides and checklists specific to SLTT areas for PDAs.

Recommendation 2024-06: Soft Costs

FEMA should develop a mechanism to include soft costs in the damage assessment process through a standard calculation, considering geographical differences, to more accurately reflect the impact to the jurisdiction before determining if damage thresholds have been met.

Recommendation 2024-07: Damage Assessment Process Improvements

FEMA should streamline the process, reduce the number of steps required, and avoid project scoping during damage assessments. The information FEMA collects should be limited to what is needed to validate damage assessments.

Recommendation 2024-08: Damage Assessment Timelines

FEMA should consider beginning a rulemaking process to modify 44 CFR § 206.36 (a) Requests for major disaster declarations, to modify the timeline for a request for assistance from 30 days of the end of the incident period to 60 days of the end of the incident period, in order to allow for a thorough joint preliminary damage assessment to be completed. The opportunity to request an extension to the timeline should remain.

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Recommendation 2024-09: Damage Assessment Process Consistency

FEMA should improve internal training, standards, and expectations in order to create consistency within the PDA process across regions to ultimately reduce the number of requests for information (RFIs) and improve timelines.

Recommendation 2024-10: Maximizing Technology

FEMA should examine workforce requirements and policies to explore which positions and functions can complete PDAs remotely through technology advancements, remote training, or other tools to decrease the fiscal impact, while maintaining the ability to provide technical assistance with field personnel.



Recommendation Research and Supplementary Information

Charge 1: Training Regime Recommendations

Establishing a training regime to ensure preliminary damage assessments are conducted and reviewed under consistent guidelines.

Recommendation 2024-01: Tiered Model of Training

FEMA should design a tiered model of PDA training to focus on realistic simulation of SLTT and non-governmental interagency coordination. This should include providing training on tools and technology to assist in data collection.

Issue Examined

Current training is geared towards FEMA PDA responsibilities, which does not allow for SLTT and non-governmental partners to effectively train on PDA responsibilities. Included in PDA training is Incident Command System (ICS) content, which is unnecessary for field responsibility in collecting damage data and can take the focus away from learning the PDA process. Training also does not include how to transfer PDA data to FEMA, which often causes delays in review and feedback of data collected.

Research and Analysis

- Inconsistent Training Across Jurisdictions and Levels of Responsibility: The current training programs vary, leading to inconsistent application of the PDA process and misunderstanding of roles.
- 2. **Terminology Barriers:** The heavy use of ICS and FEMA-specific terminology in training materials makes it hard to understand for non-emergency managers.
- 3. **Separate Training Tracks that Do Not Build Upon One Another:** The division of training between FEMA staff and SLTT personnel creates knowledge silos and hinders collaboration.
- 4. Lack of Training on How to Transfer Data to FEMA for Review: This critical piece of the process is not addressed in any training and can delay the review process that is required of PDA data.

Potential Outcomes

Tiered PDA training not only strengthens staff capabilities, but also improves recovery capacity by creating a common understanding for each level of responsibility. By implementing these



recommendations, staff are prepared to conduct quick, accurate, and safe assessments, thus contributing to a faster and more efficient recovery of communities affected by disasters.

If FEMA adopts this recommendation, the PDAAP expects the following outcomes:

- 1. **Unified Understanding of PDA:** Both FEMA and SLTT personnel will have a consistent and comprehensive understanding of the PDA process, regardless of jurisdiction or regional differences.
- 2. **Improved Collaboration:** By integrating training for FEMA and SLTT personnel, and reducing reliance on specialized terminology, there will be improved communication and collaboration during disaster response and recovery efforts.
- 3. **Enhanced Adaptation:** The training program will address regional differences, allowing for more effective application of the PDA process tailored to specific local needs.
- 4. **Technology Integration:** Setting time aside in the training to discuss and align on technology platforms will facilitate smoother data sharing and coordination during the PDA process.

References

Preliminary Damage Assessment Training: https://www.fema.gov/disaster/how-declared/preliminary-damage-assessments

Recommendation 2024-02: Training Accessibility

FEMA should expand their current training model to reduce barriers and improve accessibility by developing and enhancing Train-the-Trainer courses, webinars, virtual options, Just-in-Time training, YouTube videos, and more for the PDA process.

Issue Examined

The current training methodologies for FEMA's PDA process are insufficient in addressing a wide range of user needs. Traditional in-person training programs are often inaccessible due to geographical and logistical constraints. Additionally, the existing training lacks interactive and flexible components that could enhance the learning experience and preparedness of personnel involved in PDAs and lacks content specific to the roles of SLTT and federal personnel. There is a need for a more flexible, accessible, and comprehensive training framework that leverages modern technology and diverse delivery methods.

Research and Analysis

Currently, FEMA's PDA training is primarily delivered through in-person classes and some online modules. These offerings do not allow flexibility to take training in a way that works for specific needs. It is important for FEMA to offer a wide range of options to meet jurisdictions where they are at with respect to their knowledge of the PDA process and potential capacity



limitations. While these methods provide foundational knowledge, they are easily accessible to all potential participants. The following points outline the strengths and limitations of the existing training programs:

1. In-Person Training:

- Strengths: Offers hands-on experience, real-time interaction with trainers, and collaborative learning.
- Limitations: Limited availability, requires travel, time-consuming, and not feasible for all participants.

2. Online Modules:

- Strengths: Accessible from anywhere, self-paced, and provides foundational knowledge.
- Limitations: Lack of interactivity, limited scope, and may not address specific needs during disaster.

3. Just-in-Time Training:

- o **Strengths**: Provides immediate and relevant training during disaster events.
- Limitations: Currently underdeveloped, lacking robust content, and structured delivery.

4. Exercise Components:

- Strengths: Enhances practical skills and readiness.
- Limitations: Not consistently integrated into all training programs.

5. Train-the-Trainer Programs:

- Strengths: Multiplies the reach of training and creates a network of knowledgeable trainers.
- o **Limitations**: Limited availability and not widely implemented.

Potential Outcomes

The implementation of a more comprehensive and flexible training framework and incorporating various modern delivery methods can significantly enhance the effectiveness and accessibility of PDA training. The following recommendations outline the potential outcomes:

1. Development of Webinars for Different Audiences:

- Outcome: Tailored content for specific roles and responsibilities within the PDA process, leading to better-prepared personnel and more effective PDAs.
- Considerations: Regularly updated content, interactive question and answer sessions, and archived for on-demand access.

2. Virtual Training Opportunities:

- Outcome: Increased accessibility for individuals in remote or underserved areas, ensuring all personnel have access to essential training.
- Considerations: Use of virtual classrooms, interactive tools, and regular scheduling to accommodate different time zones.



3. Robust Just-in-Time Training Program:

- Outcome: Enhanced readiness and performance during disaster events through immediate, relevant training.
- Considerations: Quick deployment of training modules easily accessible through mobile devices and online platforms.

4. Expansion of PDA-Focused Videos (YouTube):

- Outcome: Broad dissemination of PDA knowledge, accessible to anyone at any time, enhancing general awareness and preparedness.
- **Considerations**: High-quality production, clear and concise content regularly updated to reflect best practices.

5. Adding Courses to FEMA EMI Independent Study Trainings:

- **Outcome**: Centralized repository of PDA training, easily accessible and integrated with other FEMA training programs.
- **Considerations**: Continuous development of new courses, regular updates, and inclusion of interactive elements.

6. Exercise Components in PDA Training Programs:

- Outcome: Improved practical skills and preparedness through simulated PDA scenarios.
- **Considerations**: Realistic scenarios, feedback mechanisms, and integration with existing training modules.

7. Creation of Train-the-Trainer Courses:

- Outcome: Expansion of the training network, ensuring a consistent and highquality training experience across different regions.
- Considerations: Comprehensive curriculum, certification process, and ongoing support for trainers. Also consider an expanded workforce to include private sector and non-governmental organizations based on SLTT strategies to integrate resources.

By diversifying and expanding the training methods for the PDA process, FEMA can enhance the preparedness, efficiency, and effectiveness of its personnel, ultimately leading to better disaster response and recovery outcomes.

References

Preliminary Damage Assessment Training: https://www.fema.gov/disaster/how-declared/preliminary-damage-assessments



Charge 2: Common Technological Platform Recommendations

Utilizing a common technological platform to integrate data collected by State and local governments with data collected by the Agency.

Recommendation 2024-03: Common Processes and Minimum Requirements

FEMA should establish minimum and uniform system parameters and data requirements that any jurisdiction can use to collect and transfer damage information without creating or mandating one common platform that all jurisdictions must purchase or access.

Issue Examined

Within Section 5603 of the NDAA for FY23, Congress asked the PDAAP to consider whether the use of a common technology platform would be best for the damage assessment data collection process. As part of the deliberations regarding this question, the PDAAP reviewed economic, cultural, and equity considerations. In theory, a common technological platform would streamline the damage assessment process by ensuring every agency, from SLTT to federal, utilizes one system from beginning to end. However, the execution of such a task could lead to inequities unless FEMA provides the tool at no cost, trains jurisdictions on the tool, and provides technical assistance during the damage assessment process. Additionally, choosing one tool over all others has the potential to create price gouging for the chosen vendor if FEMA selects one software above all others.

The PDAAP agreed that using one tool or one software is not realistic or equitable. Instead, FEMA should establish minimum requirements for damage assessment data collection so that jurisdictions can use what is available to them but can also easily transfer the data to states and FEMA.

Research and Analysis

There are multiple vendors that have developed damage assessment software, such as Survey 123, Crisis Track, Orion, and others. FEMA uses a version of Survey 123 and SLTT partners employ a variety of other data collection methods. The two models do not mirror each other, and the use of each tool is inconsistent. Additionally, when a state collects information, FEMA often cannot take the raw data from the state and upload it into the federal system. This requires states and applicants to submit photos and documentation multiple times during a joint PDA. The FEMA Response Geospatial Office could provide helpful data for PDAs; however, it is not utilized in all regions and is only utilized for larger catastrophic disasters.



A minimum set of standardized data or fields should be established, so data can be easily transferred from local tools to FEMA during the PDA process. The minimum requirement needs to be consistent on all PDAs.

Whatever technology FEMA chooses must be able to be widely used with minimal to no cost to ensure all partners have access. Similarly, if a tool is mandated, there must be funding available to help SLTT partners with the process. Some communities have insufficient internet connectivity in the field or lack technical expertise. Therefore, "non-technical" options need to remain available for these communities. Flexibility must be added to the process. Some applicants bring in hand-written notes, text pictures, or just talk about damages and costs. FEMA should be looking at a way to capture damages while putting less stress on SLTT partners during the recovery process.

Potential Outcomes

Clear Minimum Requirements:

By establishing well-defined minimum system and data requirements, FEMA will ensure that all jurisdictions collect and transfer damage information consistently. This will include standardizing specific data fields, file formats, metadata, and documentation practices, which will streamline the PDA process and reduce confusion across regions.

Improved Data Integration and Interoperability:

Ensuring that data collected by different systems is easily integrated will lead to a more efficient PDA process. With the adoption of common data schemas, application programming interfaces, and conversion tools, FEMA and SLTTs will be able to transfer data seamlessly, reducing the need for redundant data submissions and minimizing delays.

Enhanced Implementation Support:

FEMA's provision of resources, technical support, and funding must provide jurisdictions with varying levels of technical expertise to meet the established minimum requirements. This support will ensure that all jurisdictions, regardless of size or resources, can effectively participate in the PDA process.

User-Centric System Design:

Designing systems and processes with end-users in mind will result in more intuitive and accessible tools. Engaging SLTTs and applicants in the development and refinement of these systems will improve user satisfaction and increase the efficiency of data collection and transfer during PDAs.

Continuous Improvement through Feedback Mechanisms:

Implementing regular feedback mechanisms will allow FEMA to continuously improve the PDA process based on the experiences and suggestions of those directly involved. This could lead to more responsive and effective adjustments to the system over time.



Compliance with Legal and Privacy Standards:

By addressing legal and privacy concerns in the data collection and transfer process, FEMA will protect sensitive information and ensure that all procedures comply with relevant regulations. This will build trust among all stakeholders and reduce potential legal risks.

Scalability and Future-Proofing:

By designing systems that are scalable and adaptable, FEMA will ensure that the PDA process can evolve with future technological advancements and changes in regulatory requirements. This will create a flexible system that can handle increasing data volumes and new challenges over time.

Recommendation 2024-04: Big Data

FEMA should ensure all regions can ingest large amounts of SLTT damage assessment data through a FEMA hosted common file sharing and storage tool (e.g., Google, Dropbox). Additionally, FEMA should provide minimum system requirements and configuration guidance to ensure compatibility between SLTT damage assessment platforms and FEMA's file sharing tool.

Issue Examined

The current PDA process begins with Initial Damage Assessment (IDA) data gathered by local governments and Tribal Nations through a variety of methods and tools. FEMA does not impose specific requirements on how SLTTs conduct IDAs or validate the information collected. The existing process does not make available a single file sharing tool that is universally adopted, which creates inconsistencies between regions and may delay or slow down the completion of timely PDAs. Additionally, FEMA systems currently allow only small data transfers, requiring SLTT partners to break down data into small pieces for transfer. This can cause loss of data, duplication of effort, or confusion when trying to piece it back together for FEMA to validate and determine eligibility. There is a need to ensure all regions can ingest large amounts of local IDA data collected by way of a common FEMA hosted file sharing tool, and by creating minimum system requirements and configuration guidance to ensure compatibility between damage assessment platforms and FEMA's data sharing tool.

Research and Analysis

FEMA currently provides digital damage survey templates or "street sheets" to help with the collection of damage information. There are also checklists of information that should be collected to help guide the IDA process and prepare for the joint PDAs. While these tools/lists assist with the essential elements of information needed, they do not provide guidance on how to best package the information, or what type of system or tool to use for storage, validation, and transmittal.



SLTT governments utilize different tools that are available electronically, as well as handwritten or paper forms. There is no mandate to adopt or use any particular tool; each SLTT government is responsible for procuring, setting up, maintaining, paying for, and providing technical support for the chosen platform.

Digital Damage Surveys

FEMA's damage assessment survey templates for both Individual Assistance (IA) and Public Assistance (PA) are available for SLTT partners to use during the IDA process. The standardized input fields allow jurisdictions to collect the same information that FEMA gathers during the joint PDA operation. This information is used to determine whether the jurisdiction is eligible for a disaster declaration. The data captured using these templates is immediately available in the jurisdiction's ArcGIS Platform and can assist in FEMA's review of the damages in the event a joint PDA is requested.

Submitting IDA Data to FEMA Regional Office

Following a disaster, a state, tribe, or territory (STT) may choose to use the digital survey template for the initial assessment of damages, as outlined in 44 CRF § 206.33(a), to request a joint PDA. When requesting a joint PDA, STT emergency management officials may choose to coordinate with their geographic information systems counterparts in order to download a file geodatabase (.gdb) version of the IDA dataset. This file format is the most efficient way for FEMA to review IDA data. A file geodatabase file format of the data is especially helpful as it allows FEMA to review photos associated with each damage location on the map. Excel files (.csv) are a secondary option but are not preferred since this format will not transmit photos. Without photos, FEMA cannot visualize damages to inform the strategy of a field operation or virtually assess damages during a remote assessment.

Once FEMA has uploaded the STT's file geodatabase (.gdb) into FEMA's Field Assessment and Collection Tools (FACT) System, the Regional Office will determine, in coordination with the STT, whether the joint PDA will be in-person, virtual, or a hybrid of each. For virtual PDAs, the STT file geodatabase dataset can be validated directly within the FACT System in conjunction with a pre-arranged virtual collaboration/meeting platform. For in-person PDAs, the FEMA PDA Coordinator and Field Assessors can review damage points on the map to build a common operating picture prior to deploying to the field.

Comparative System - NEMSIS

"The National Emergency Medical Services Information System (NEMSIS) is the national system used to collect, store, and share emergency medical services (EMS) data from the U.S. states and territories. NEMSIS develops and maintains a national standard for how patient care information resulting from prehospital EMS activations is documented. This information is voluntarily submitted to the National EMS Data Repository at NEMSIS by state and territory EMS officials. NEMSIS is a collaborative system to improve prehospital patient care through the standardization, aggregation, and utilization of point of care EMS data at a local, state and



national level. NEMSIS is a program of the National Highway Traffic Safety Administration's Office of EMS and hosted by the University of Utah.

NEMSIS provides the framework for collecting, storing, and sharing standardized EMS data from states nationwide. The NEMSIS uniform dataset and database help local, state, and national EMS stakeholders more accurately assess EMS needs and performance, as well as support better strategic planning for the EMS systems of tomorrow. Data from NEMSIS is also used to help benchmark performance, determine the effectiveness of clinical interventions, and facilitate cost-benefit analyses (NEMSIS, 2024)."

Comparative System - National Fire Incident Reporting System

The National Fire Incident Reporting System (NFIRS) is a voluntary reporting standard that fire departments use to uniformly report on the full range of their activities, from fire to EMS to severe weather and natural disasters. After responding to an incident, a fire department completes the appropriate NFIRS modules. Each module collects a common set of information that describes the nature of the call, the actions firefighters took in response to the call and the end results, including firefighter and civilian casualties and a property loss estimate.

The fire department submits its all-incident data to the state, tribal, or territorial agency responsible for NFIRS data. The agency gathers data from all its participating departments and reports the compiled data to the U.S. Fire Administration (USFA). The fire department can also submit their data directly to the USFA's NFIRS national database through import tools designed specifically for this process. The NFIRS software is available at no cost to SLTT agencies and fire departments.

Potential Outcomes

Functionality

As recommended, the FEMA hosted file sharing tool will:

- Allow for large data transfers, minimizing work and time currently spent breaking files into smaller packages.
- Easily accept information from a variety of SLTT damage assessment platforms.
- Be hosted online.
- Include options for low bandwidth areas if needed.
- Allow for manual input or automated transfer for files that are formatted and packaged according to guidance.
- Utilize the same file sharing tool for IA and PA.

Cost and Funding

The PDAAP considered the following related to cost and funding of a FEMA hosted file sharing tool:

- Initial set up costs for data sharing tool.
- Recurring costs for hosting the tool.



 Funding for technological support to assist SLTT governments in accessing the file sharing tool, troubleshooting technical issues, and ensuring compatibility with their local damage assessment platforms.

Implementation and Integration

The PDAAP discussed the following considerations for implementation and integration:

- Survey at state level to determine what damage assessment platforms are already in use, and what their current configuration is. This can help inform FEMA guidance on minimum system requirements and configuration needed to ensure compatibility with the FEMA data sharing tool.
- Provide SLTT governments with system requirements and configuration guidance to ensure compatibility between local damage assessment platforms and FEMA's file sharing tool.
- Consider incentives for SLTT who align their damage assessment platforms with new system requirements and configuration guidance.
- Consider additional resources for SLTT who do not already utilize a damage assessment platform and may need extra help to begin using the FEMA file sharing tool to transmit data, to ensure equitable access.

Although a single, universal damage assessment platform coupled with a FEMA hosted file sharing tool would be ideal, the challenges to creating, implementing, maintaining, and mandating use of a single platform are likely to be too great. The alternative of providing a FEMA hosted file sharing and storage tool that can easily transfer (two way) and store large amounts of data, coupled with guidance on common system requirements for SLTT to set up their damage assessment tool of choice, will offer the most comprehensive and realistic approach.

References

- How to Share Initial Damage Assessment Geospatial Datasets with FEMA:
 https://www.fema.gov/fact-sheet/how-share-initial-damage-assessment-geospatial-datasets-fema
- What is the National Emergency Medical Services Information System: https://nemsis.org/what-is-nemsis/
- National Fire Incident Reporting System: https://www.usfa.fema.gov/nfirs/
- Digital Damage Surveys: https://www.fema.gov/disaster/how-declared/preliminary-damage-assessments#surveys



Charge 3: Instructional Materials Recommendation

Assessing instruction materials provided by the Agency for omissions of pertinent information or language that conflicts with other statutory requirements.

Recommendation 2024-05: Job Aids

FEMA should enhance their technical assistance to SLTT partners by developing quick guides and checklists specific to SLTT areas for PDAs.

Issue Examined

As the number and severity of incidents continue to rise across the nation, the complexity, time, and resource constraints involved in conducting a traditional PDA coupled with the increased capabilities of technology, information sharing, and remote sensing creates an opportunity to explore changes to the PDA process at the SLTT and federal levels. In particular, enhancements to technical assistance, such as quick guides and checklists, should be tailored specifically to the SLTT audience.

Research and Analysis

There exists inconsistent training and knowledge capabilities amongst those involved in PDAs. Not every region has the same capabilities and SLTT partners have varying levels of capacity and access to training. The PDA process needs to allow some flexibility to regions, especially regarding technology, to account for the geographical, cultural, and social differences in each area of the country.

The current training regime is primarily geared toward FEMA personnel. However, the PDA process begins at the most local level. As outlined in Recommendation 2024-03, the PDA process is highly dependent upon technology. All damage assessments must be transferred and translated into the proper format for the SLTT, FEMA Region, and FEMA Headquarters. Therefore, instruction materials should be issued on how the different technology used by SLTTs can be utilized with FEMA's system and the potential barriers with technology. Quick guides and pocket guides should be developed for SLTTs that focus more on SLTT processes and procedures. Physical, rain-proof, and laminated materials should be considered for use in the field. This will ensure that the process is more efficient, effective, and timely.

Potential Outcomes

The PDAAP anticipates the following outcomes from implementing this recommendation:

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- 1. Quick guides and pocket guides would provide better guidance geared specifically for the SLTT audience, rather than FEMA field personnel.
- 2. Quick guides and pocket guides would better compliment any available just-in-time training.
- 3. Quick guides and pocket guides would ensure SLTT partners are prepared to engage in the process, ensuring the process is conducted more efficiently and will improve consistency across regions for the PDA process.

References

■ PDA Assessment Guide:

https://www.fema.gov/sites/default/files/documents/fema_pad-pdaguide_operational-draft_v1.1.pdf (Page 115, checklist)

■ PDA Pocket Guide:

https://kyem.ky.gov/recovery/Documents/Preliminary%20Damage%20Assessment%20(PDA)%20Pocket%20Guide.pdf



Charge 4: Streamlining PDA Process Recommendations

Identifying opportunities for streamlining the consideration of preliminary damage assessments by the Agency, including eliminating duplicative paperwork requirements and ensuring consistent communication and decision making among Agency staff.

Recommendation 2024-06: Soft Costs

FEMA should develop a mechanism to include soft costs in the damage assessment process through a standard calculation, considering geographical differences, to more accurately reflect the impact to the jurisdiction before determining if damage thresholds have been met. This could be achieved by using a simple percentage-based calculation or metric.

*Soft costs include, but are not limited to, equipment mobilization, engineer costs, contract and project management. When these costs are included in an estimate and identified during the PDA, they are deducted from the anticipated project cost by FEMA, thereby reducing the eligible amount.

Issue Examined

When costs are included in an estimate and identified during the PDA, they are deducted from the anticipated project cost by FEMA, thereby reducing the eligible amount. These costs will be hereafter referred to as soft costs. These soft costs are not allowed in SLTT's site estimates during the PDA, despite being potentially eligible for PA reimbursement as described in FEMA's PDA Guide.

Many projects typically require the completion of engineering, design, and technical studies, and any contracted projects will have associated management costs. While project costs can be included in a PDA, soft costs cannot. FEMA will remove soft costs from an SLTT's site estimate, if included. This eliminates otherwise eligible PA costs from SLTT damage assessment totals, which may affect the SLTT per capita threshold thereby making it more difficult to get a major disaster declaration.

To alleviate any concerns that SLTTs will overestimate soft costs to increase damage assessment totals to meet their per capita threshold to qualify for PA, a standard estimating technique could be implemented. This could include a provision that allows a fixed percentage of soft costs to be included.



Research and Analysis

During the PDA process for PA, the SLTT must provide an itemized list that supports the costs being reported for each project site. Currently, each estimated site sheet should include required materials, labor, equipment, etc., along with costs for the repair to restore it to the pre-disaster condition. If any soft costs are included, they are removed before FEMA makes a determination on whether disaster damage thresholds have been met. Even when engineers and contractors offer estimates, they are examined and changed to remove any ineligible costs.

Soft costs include, but are not limited to, equipment mobilization, engineer costs, contract, and project management. Because these costs are required for the damaged facilities to be replaced or repaired, these soft costs should be included in the damage assessment totals as part of the evaluation of whether the jurisdiction has met PA damage thresholds. This would be an easy transition since conventional estimating tools already include percentage-based estimates for contract management and administration, mobilization, and design and engineering costs.

Potential Outcomes

This recommendation would remove current restrictions that prohibit SLTTs from accurately representing total damage costs for public facilities. By improving accuracy of the data, SLTTs may be eligible for PA programs since the addition of soft costs could bring total damage assessment costs above current PA thresholds.

References

■ **FEMA PDA Guide:** https://www.fema.gov/sites/default/files/documents/fema_pad-pda-quide_operational-draft_v1.1.pdf (Page 62)

Recommendation 2024-07: Damage Assessment Process Improvements

FEMA should streamline the process, reduce the number of steps required, and avoid project scoping during damage assessments. The information FEMA collects should be limited to what is needed to validate damage assessments.

Issue Examined

The damage assessment process, whether for IA or PA, needs to be streamlined and should include those tasks essential to determine if FEMA thresholds have been met. Damage assessments should focus on total damages and impact to the community.



Research and Analysis

In many cases, FEMA personnel use the PDA process to begin project scoping, requiring SLTT partners to provide information outside the scope of damage and impact assessments. This practice turns into writing projects on site. This is time consuming, unnecessary, and places an undue burden on jurisdictions before thresholds have been determined. Less documentation should be required, and all activities should focus on damage assessments and whether damage thresholds have been met.

FEMA should prevent PDA staff from conducting eligibility discussions and providing approvals to community members in the field before PDA finalization. There should be no eligibility discussions in the field. FEMA should move away from project scoping and back to assessing damage, taking into consideration only what is required for the PDA versus the information required once a disaster declaration threshold has been met.

Potential Outcomes

Reducing the number of steps in the process, through the removal of project scoping, makes the site verification process more efficient and effective. This improved process would decrease the burden to SLTT partners in documentation requests, RFIs, and information required for project scoping. Additionally, this change would decrease confusion by ceasing to provide approvals in the field and discussing eligibility decisions with community members.

References

- **FEMA PDA Guide:** https://www.fema.gov/sites/default/files/documents/fema_pad-pda-quide_operational-draft_v1.1.pdf
- PDA Pocket Guide: https://kyem.ky.gov/recovery/Documents/Preliminary%20Damage%20Assessment%20(PDA)%20Pocket%20Guide.pdf

Recommendation 2024-08: Damage Assessment Timelines

FEMA should consider beginning a rulemaking process to modify 44 CFR § 206.36 (a) Requests for major disaster declarations, to modify the timeline for a request for assistance from 30 days of the end of the incident period to 60 days of the end of the incident period, in order to allow for a thorough joint PDA to be completed. The opportunity to request an extension to the timeline should remain.

Issue Examined

In the sequence of delivery for disaster assistance, SLTTs are consistently unable to meet the requirement of a Request for Federal Assistance (RFA) within 30 days of the occurrence of the



incident. With the increase in storm surge flooding, this is likely to continue due to the inability to assess total damages until water recedes. In other areas, terrain and damaged roads may limit the ability to accurately assess damages in such a short time. Many jurisdictions are still responding to community needs during this time and do not have the capacity to conduct damage assessments while response efforts are underway.

States regularly request an extension of the timeline to address emergency response actions (flood fighting, firefighting, search and rescue, or overall incident stabilization). In addition, areas impacted by an incident may be inaccessible for prolonged periods of time following the occurrence (fire still burning, floodwaters not yet receded, transportation route damages, etc.).

Research and Analysis

Each SLTT has a process in place to evaluate the effects of an incident and determine if supplemental state assistance is required. In many instances a local government or Tribal Nation may declare a declaration of disaster or emergency at the onset of an incident. However, governors must perform their own due diligence in determining whether an incident rises to the level of a state declaration. Particularly in rural areas, state or territorial emergency management agencies may not be notified immediately of an incident. However, current regulations initiate a timeline whether or not the state has been made aware. One state reported that the timeline to determine whether a state disaster should be declared often exceeds 30 days.

Many local jurisdictions (and some state jurisdictions) do not have the capacity or capability to conduct adequate IDAs and cost estimation in the time provided or with current resources. Oftentimes joint PDAs begin developing cost estimates for emergency work and permanent repairs at the same time as damage assessment validation. With a 30-day timeline required in regulations from 44 CFR, the pressure to conduct PDAs for a Governor or Tribal Executive to submit a RFA may lead to inadequate time to thoroughly assess the damage, costs for emergency and permanent work, and impacts to an affected jurisdiction.

It is important to note that the PDAAP does not recommend changing the ability for a jurisdiction to request an extension. Instead, the panel recommends amending the initial timeline from 30 days to 60 days to allow more time for the PDA process, while still allowing SLTT partners the ability to request an extension if warranted.

Potential Outcomes

If combined with adoption of other recommendations from the PDAAP, FEMA Regions and the Headquarters Declarations Unit should see more comprehensive regional analyses, and more thorough RFAs given an expanded timeline for RFAs to be submitted. A longer timeline to request federal assistance may also potentially allow SLTT governments to collect more details,



particularly for disasters where the county-wide and statewide indicators are close to the thresholds.

References

44 CFR § 206.36 (a) Requests for major disaster declarations: https://www.ecfr.gov/current/title-44/chapter-I/subchapter-D/part-206/subpart-B/section-206.36

Recommendation 2024-09: Damage Assessment Process Consistency

FEMA should improve internal training, standards, and expectations in order to create consistency within the PDA process across regions to ultimately reduce the number of RFIs and improve timelines.

Issue Examined

Consistency in the PDA process has become a concern. Each FEMA Region has its own nuances and processes when it comes to conducting PDAs. This leads to varying messages and requirements depending on the personnel that FEMA deploys to support the disaster. Therefore, a lack of consistent PDA training at the regional level has resulted in inefficient program delivery.

Research and Analysis

There is an increased number of disasters, including billion-dollar disasters, throughout the United States. SLTTs have seen the need for FEMA regional staff to move from one part of the country to another to respond to the increased need. It has become apparent with these personnel shifts that regulation interpretation and program delivery are inconsistent.

After pivoting to the post COVID-19 emergency management environment, federal and SLTT partners have lost a tremendous amount of experience surrounding the PDA process to retirements and personnel leaving the field. For example, 75% of the employees in New Hampshire Homeland Security and Emergency Management have less than three years of experience. This trend is consistent across FEMA Region 1 and other regions. Additionally, the rotation of staff within FEMA PDA teams has underscored challenges stemming from the lack of training, unclear workflows, and an absence of comprehensive understanding, all of which have led to difficulty working through the PDA process. Although this is just one Region, similar circumstances exist nationwide. As staff move from region to region to assist with the increased needs, SLTT partners are left with differing opinions and policy directions and conflicting information. Following the PDA process, this then leads to an increased number of RFIs that create additional delays and place an undue burden at the SLTT levels. There is now a greater



need to revisit internal training standards, and expectations to create greater consistency across FEMA Regions.

Potential Outcomes

It should be expected that if the recommendations are adopted and implemented into the PDA guidance, a new efficient model will be created. This will ultimately support the process requirements to request a federal declaration, create consistency across regions, decrease the burden to SLTT partners and decrease delays due to RFIs from FEMA personnel.

Recommendation 2024-10: Maximizing Technology

FEMA should examine workforce requirements and policies to explore which positions and functions can complete PDAs remotely through technology advancements, remote training, or other tools to decrease the fiscal impact, while maintaining the ability to provide technical assistance with field personnel.

Issue Examined

Disaster costs have increased exponentially in recent years. Managing multiple open disasters and PDAs is labor-intensive. Additionally, FEMA personnel that are sent to assist SLTTs often are new to FEMA with minimal training. These personnel often have to rotate in and out, leading to confusion and a lack of consistency at the SLTT levels, not to mention the costs for housing, mileage, and per diem. For these reasons, FEMA should continue to look at efficiencies to decrease costs and improve processes for greater efficiency and fiscal responsibility. Examining the roles of PDA personnel and conducting an analysis of essential tasks will provide FEMA with information that will assist in determining which specific positions must be in the field versus those positions that can be done remotely.

FEMA should consider ways in which to decrease the overall costs of the PDA process, whether that is through the use of technology to decrease travel costs, technical assistance to states on the process, or other areas. For example, states can conduct the site visits to verify damages instead of deploying FEMA personnel.

This recommendation does not state that all PDA tasks should be remote. Instead, a balanced approach is needed. Virtual damage assessments are effective in some cases but are not adequate for all and should not be required. FEMA needs to accommodate the jurisdictions, provide appropriate disaster response for specific functions, and provide technical assistance to SLTTs based on the jurisdiction.

Research and Analysis



The National Oceanic and Atmospheric Administration's National Centers for Environmental Information released its 2023 billion-dollar disaster report in January 2024. In this report, it stated that 2023 is the fourth consecutive year in which 18 or more separate billion-dollar disaster events have impacted the U.S., marking a consistent pattern that has become the new normal. The U.S. billion-dollar disaster damage costs over the last ten years (2014-2023) were also historically large with at least \$1.2 trillion from 173 separate billion-dollar events. From 1980-2000, about 75% of all disaster-related costs were due to billion-dollar disasters. That percentage has risen to greater than 85% of all disaster-related costs. It is important to keep in mind that these estimates do not reflect the total cost of U.S. weather and climate disasters, only those associated with events more than \$1 billion in damages (Smith, 2024).

FEMA has also documented difficulty with short staffing which has led to challenges in response to disasters such as Hurricane Maria and the 2018 Camp Fire (Currie, 2017). Additionally, as FEMA staff rotates in and out of a disaster, inconsistencies between regions become apparent to the SLTT partners which causes confusion, delays, and misconceptions. By limiting the number of FEMA staff that must deploy, FEMA staff can provide more long-term support to impacted jurisdictions without the need to deploy and rotate shifts. The PDAAP recognizes the need for field staff in certain circumstances, but with technological advances and the higher administrative cost of disasters, an examination of PDA staffing needs is warranted.

Potential Outcomes

Outcomes include:

- A decrease in overall disaster administrative costs.
- Policy initiatives that are more fiscally responsible.
- Right-sizing disaster response to meet the needs of the impacted jurisdiction.
- Greater ability to provide technical assistance both virtually and in the field.

References:

- 2017 Hurricanes and Wildfires: Initial Observations on the Federal Response and Key Recovery Challenges: https://www.gao.gov/assets/700/694231.pdf.
- 2023: A historic year of Y.S. billion-dollar weather and climate disasters:.

 https://www.climate.gov/news-features/blogs/beyond-data/2023-historic-year-us-billion-dollar-weather-and-climate-disasters#:~:text=Other%20years%20are%20light%20gray,173%20separate%20billion%2Ddollar%20events.



Conclusion

The PDA process is an essential activity following emergencies and disasters to determine the extent of damage and destruction, the resources necessary for recovery, and the total impact to the affected community. The PDAAP expresses gratitude to Congress for acknowledging the importance of the PDA process and for creating an opportunity for broad input to enhance FEMA's processes and procedures for more effective and efficient recovery.

With this 2024 report, the PDAAP addressed all four of the actions required by the law with recommendations, background information, research, and potential outcomes if recommendations are implemented. The PDAAP encourages prompt consideration and implementation of these recommendations to improve FEMA processes and procedures related to the PDA process.



Acknowledgements

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