

# Lessons Learned From Auditing Disasters in the United States

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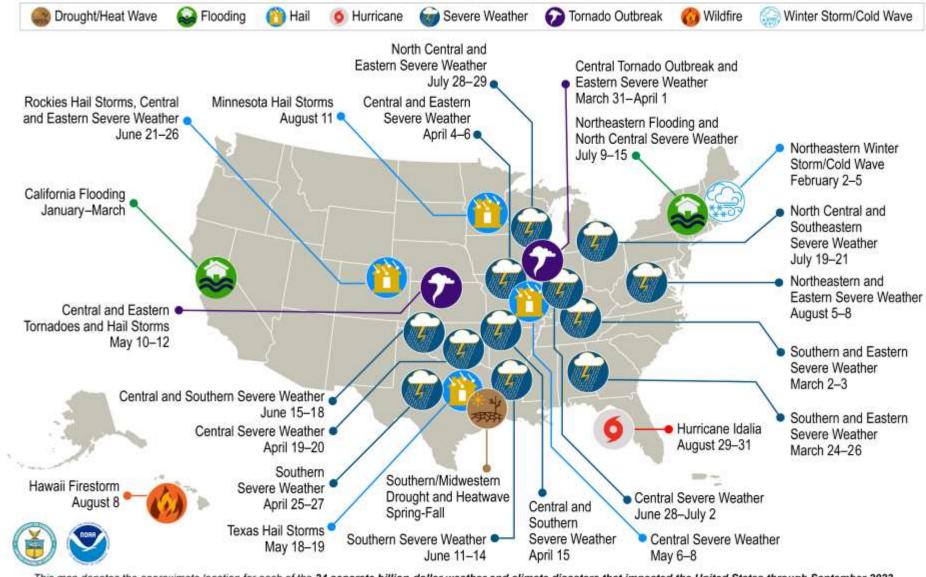
## **Framing**

 The purpose of this presentation is to share lessons learned from GAO's experience auditing disaster preparedness, response, and recovery efforts.

 Key theme: While disasters are unexpected, you must prepare for them as if they are routine.

#### U.S. 2023 Billion-Dollar Weather and Climate Disasters

- through October of this year, there have been <u>24</u> weather/climate disaster events with losses exceeding \$1 billion each.



This map denotes the approximate location for each of the 24 separate billion-dollar weather and climate disasters that impacted the United States through September 2023.



### All Disasters in the U.S. Start Local

Disaster response occurs first at the **Local** level. Local governments and voluntary agencies represent the front line when disasters occur.

When a local jurisdiction does not have the resources it needs to adequately respond to a disaster, it turns to the **State** government for assistance. State governments may in turn request disaster assistance from the federal level.

The <u>Federal</u> government will assist in disaster response when a disaster is of such high severity or consequence that the local and state governments together cannot supply the needed response resources. The Federal Emergency Management Agency (FEMA) is the federal agency that coordinates with affected states to access federal programs and support.

The number of federal disaster declarations and assistance \$\$ have gone way up in recent years. In 2020, there were over **300** federal declarations

### Maui Fire Damage





Hurricane Ian Damage

Extreme Flooding in Norfolk, Virginia





Source: U.S. Navy. | GAO-19-453

Source: GAO. | GAO-23-106544

### **Phases of Emergency Management**

#### Recovery

Refers to the actions taken to assist those affected by disasters to recover effectively, including, but not limited to, rebuilding infrastructure systems; providing adequate interim and long-term housing for survivors; and restoring services.

### Mitigation

Refers to the actions taken to reduce the loss of life or property by lessening the impact of disasters. These actions include, but are not limited to, efforts to improve the resilience of critical infrastructure; risk reduction for specific vulnerabilities from natural hazards; and initiatives to reduce future risks after a disaster has occurred.

Emergency Management Cycle

#### Response

Refers to the actions taken during and immediately after a disaster to save lives, protect property and the environment, and meet basic human needs.

#### Preparedness

Refers to the actions taken to plan, organize, equip, train, and exercise to build and sustain the capabilities needed to prevent, protect against, mitigate the effects of, respond to, and recover from threats, such as natural disasters.



### **Background**

- In the United States, the federal approach to disaster preparedness, response, and recovery is fragmented across more than 30 federal agencies.
- Some agencies have multiple disaster assistance programs and most of these are in the form of grants or loans to state and local levels of government.
- The Federal Emergency Management Agency (FEMA) within the Department of Homeland Security is the lead federal agency responsible for disaster preparedness, response, and recovery.



## Disaster Failures in the U.S. Led to Policy Changes: Learn from our Mistakes!

- 1992: Hurricane Andrew in Florida showed gaps in response capabilities and building codes.
- 2005: Hurricanes Katrina and Rita exposed problems in federal coordination and authorities.
- To address gaps, Congress passed major legislation (the Post-Katrina Act) requiring federal agencies to develop a national preparedness system and assess national capabilities.
- 2008: FEMA issued its National Response Framework, codifying roles and responsibilities.
- 2012: Hurricane Sandy in New York shifted the focus from response to strengthening resilience before disasters strike.
- 2017: numerous concurrent hurricanes In the Caribbean and Southeast (and western wildfires) led to further legislation to ensure resilient rebuilding and focus on equity in disaster assistance.



### **Preparedness**

- The U.S. National Preparedness System sets forth 32 core capabilities across 5 areas.
- This is the foundation for measuring national preparedness, identifying gaps, and allocating resources. All levels of government accept this system and practice it.
- 5 areas are:
  - Prevention
  - Protection
  - Mitigation
  - Response
  - Recovery

### **Examples of Hazard Mitigation Projects**



Culvert with a protective headwall that prevents erosion and allows water to pass under a road



Watertight enclosure to prevent floodwater damage



Source: GAO. | GAO-22-106046



### **Preparedness: Lessons Learned**

- Preparedness involves changing the mindset from: this might happen to this will happen and taking steps to ensure you are ready.
- You must identify and test leadership roles, responsibilities, and authorities before.
- It's important to identify gaps in emergency preparedness through exercises and other assessments such as after-action reports.
- Governments often identify gaps in emergency preparedness but do not always followup to address these weaknesses leading to problems during an actual emergency.
- Identifying solutions to address preparedness gaps includes planning and budgeting to allocate resources to close these gaps.
- Identifying staffing capacity challenges early and often can help prevent shortages and workforce management issues throughout the entire emergency cycle.



### Response

Disaster response activities focus on short and medium-term priorities like saving lives, search and rescue, power restoration, protecting property and the environment, and providing for basic human needs after a disaster.

Aircraft Dropping Fire Retardant on Wildfire



Source: RCK/stock.adobe.com. | GAO-23-105292



### Response: Lessons Learned

- There needs to be a designated chain of command for disaster response so roles and responsibilities are clear. This can help eliminate officials taking actions outside of their delegated authority or not fulfilling their responsibilities.
- Have advance plans and guidance for entering contracts to obtain life-saving goods and services from the private sector. This can help governments expeditiously obtain needed goods and services with consistency and can eliminate confusion and missed opportunities. Also helps eliminate waste and fraud.
- Have clear procedures and controls related to allowable disaster-related spending and recordkeeping. Once a disaster hits it can be difficult to establish and communicate such procedures and controls.
- Involve finance and administration officials, not just emergency managers!



### **Lesson Learned: Avoiding Improper Payments**

- Implementing new emergency assistance programs quickly or significantly increasing funding disbursed through existing programs increases the risk of improper payments and fraud.
- There are practices to limit improper payments <u>before</u> an emergency:
  - Developing emergency internal controls in advance
  - Identifying data-sharing opportunities
  - Assigning clear roles and responsibilities
  - Implementing open recommendations related to improper payments
  - Applying lessons learned from past emergencies

How can applying
GAO's Framework for
Managing Improper
Payments in
Emergency Assistance
Programs help address
increased risk during
emergencies?

### In emergencies, the risk of improper payments may be higher



Emergencies unfold rapidly, and assistance must be distributed quickly



Estimating improper payments after the first year of assistance may be too late, as most funds are already disbursed



Emergency programs may allow applicants to certify their own eligibility for assistance, which can save time but increases the risk of improper payments, particularly due to fraud



The need for federal and nonfederal entities to coordinate means federal agencies may have additional oversight responsibilities



Emergency legislation can introduce new requirements and risks for both new and existing programs

### Examples of how the framework can address this increased risk





Developing internal control plans that can be immediately implemented or adapted for a future emergency can help ensure that agencies are ready to respond to emergencies (**Principle 1**)





Estimating improper payments expeditiously, including during the initial year of implementation, can help programs to address issues sooner (Principle 2)





Prioritizing and implementing prepayment controls, such as using existing data sources to verify applicants' identity and eligibility, can help to stop improper payments before they are issued (Principle 3)





Monitoring the controls used by nonfederal entities is a step to meeting oversight responsibilities and can help ensure the effective use of federal funds (**Principle 4**)





Providing timely, high-quality guidance to nonfederal entities, including guidance on program implementation, eligibility requirements, and appropriate use of funds, can help them interpret statutory requirements (**Principle 5**)

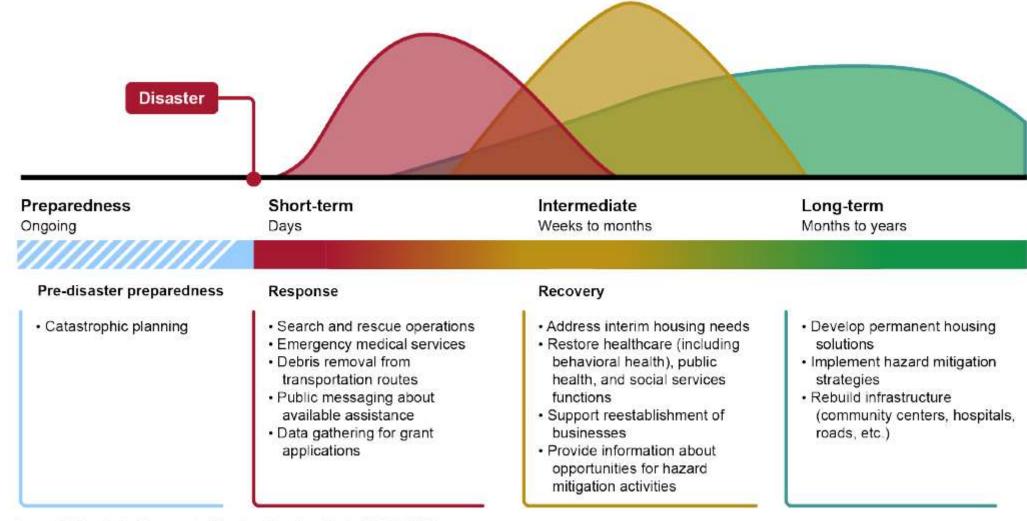


### Recovery

- The recovery phase is the longest, most expensive, and most critical to plan for.
- Disaster recovery activities include short and long-term efforts to rebuild communities both physically and economically.



In September 2020, a wildfire destroyed over 80% of the structures in Malden, Washington, including all government buildings. This photo shows recovery progress towards a new Town Hall taken in September 2023.



Source: GAO analysis of Department of Homeland Security policy. | GAO-23-104956

- Recovering from a disaster is the longest and most costly phase of a disaster and yet is the phase entities are least prepared for.
- For example, as of July 2022, FEMA had 494 open disasters dating back to 2004, meaning these disasters were still receiving some level of federal support.

## Puerto Rico Demonstrates How Long Recovery Can Last

- In September 2017, Hurricanes Irma and Maria severely damaged Puerto Rico's electricity grid, causing the longest blackout in U.S. history (11months).
- \$3.9 billion was awarded for temporary repairs and \$10 billion has been committed to fund longer-term grid recovery.
- Six years later, the recovery efforts in Puerto Rico are not where they need to be, with reconstruction
  of thousands of projects not even underway.

#### Damaged Power Lines in Puerto Rico in November 2017, after Hurricane Maria





Source: Federal Emergency Management Agency. I GAO-20-141



### **Recovery: Lessons Learned**

- Plan for the recovery phase long before recovery is even on the horizon.
- Invest in an overarching coordination structure and guiding principles for disaster recovery to help governments leverage and focus on existing resources, programs, projects, and activities to promote effective recovery.
- Consider how fragmentation across disaster recovery programs can affect the recovery—leading to delays, duplication of efforts, and confusion about eligibility—and how this can be addressed.
- Develop a way to comprehensively identify and assess the risks to recovery and help governments develop contingency plans to avoid risk.



### **Disaster Resilience**

- The ability to prepare for anticipated hazards, adapt to changing conditions, and with-stand and recover rapidly from disruptions.
- Investments in disaster resilience are a promising avenue to address fiscal exposure because such investments offer the opportunity to reduce the overall impact of disasters.
- GAO's <u>Disaster Resilience Framework</u> is written for a U.S. federal audience, but is broadly applicable. It lays out 3 broad principles to guide decision makers:





### **Disaster Resilience Framework**



#### Federal tools for facilitating action:



#### **Policy tools**

The federal government can create laws, regulations, and directives that require specific actions for enhancing disaster resilience.



#### **Financial tools**

The federal government can use financial assistance such as grants, cooperative agreements, loans, and special tax considerations to provide incentives to individuals, corporations, localities, and states.



#### **Direct action**

The federal government can help realize national resilience in the actions it takes as the owner of certain critical infrastructure and property, as a purveyor of information, and in provision of technical assistance or direct services.

#### Examples of disaster resilience decision makers:

- Federal executives and policymakers with immediate responsibility for protection of infrastructure and ecosystems
- Federal executives and policymakers with responsibility for programs and regulations that promote risk-reduction decisions by nonfederal entities
- State executives and policymakers with responsibility for programs and regulations that promote risk-reduction decisions by jurisdictions within their boundaries
- Local policymakers, managers, and planners with responsibility for land use planning, building code adoption and enforcement, and design decisions
- Private sector owners and operators of critical infrastructure with responsibility for design decisions
- Small business and residential property owners with responsibility for design decisions
- Private financial market actors with the ability to partner with other decision makers to stimulate and leverage risk-reduction investment and enhance loss protection
- Non-governmental organizations with responsibility for establishing and supporting adoption of standards



### Resilience: Lessons Learned

- Don't wait until after a disaster occurs to assess the resilience of a community –
  assessing, monitoring, and improving resilience should be an ongoing process in every
  community.
- Investing in resilience early and often can greatly reduce the need for more costly future assistance.
- Have communities research available grants prior to a disasters to avoid missed funding opportunities for resilience-building projects.



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