Ending Analysis Paralysis by Implementing Best Practices in Your Dashboards

November 13, 2019

Hosted by National Alliance for Public Safety GIS (NAPSG) Foundation

napsgfoundation.org | @napsgfoundation
Introductions

Session: Ending Analysis Paralysis by Implementing Best Practices in Your Dashboards
Tricia Lawson, NAPSG Foundation
• Doug Eades and Dir. Dossett, KY Division of Emergency Management
• Chris Vaughan, FEMA Response Planning and Exercise Division
• Chief Jeff Dulin, International Association of Fire Chiefs
Agenda

10:10 – 10:15  Welcome & Introductions

10:15 – 10:35  KY Division of Emergency Management (20 min)
10:35 – 10:45  Facilitated Group Discussion (10 min)

10:45 – 11:05  FEMA National Hurricane Journal (20 min)
11:05 – 11:15  Facilitated Group Discussion (10 min)

11:15 – 11:35  National Mutual Aid System (20 min)
11:35 – 11:45  Facilitated Group Discussion (10 min)

11:45 – 11:50  Wrap-Up & Break for Lunch
How Did We Get Here?
GIS as a Decision Support Tool
Untangle, Organize, and Intelligently Present Information

1. What is the problem you are trying to solve?
2. What are the key operational questions needed to arrive at a decision?
3. What information is needed to answer that question? Both in data and analysis.

How full are my shelters?
Do I need to open more shelters?
Where should I open the shelters?
KY Division of Emergency Management

Director Michael Dossett
Doug Eades, IT Supervisor, GIS Lead
Innovations in Emergency Management Data Transfer

Michael E. Dossett, Director
Doug Eades, GIS Lead
Problem:

During large scale weather events, counties are using multiple platforms to report county level information...

- Bifurcated reporting
- Incomplete reporting
- Difficult to track county impact
- Difficult to assemble & distribute data

NWSChat Live
Problem:

During large scale weather events, counties are using multiple platforms to report county level information...

- Bifurcated reporting
- Incomplete reporting
- Difficult to track county impact
- Difficult to assemble & distribute data
Problem:

During large scale weather events, counties are using multiple platforms to report county level information...

- Bifurcated reporting
- Incomplete reporting
- Difficult to track county impact
- Difficult to assemble & distribute data

Facebook
Problem:

During large scale weather events, counties are using multiple platforms to report county level information...

- Bifurcated reporting
- Incomplete reporting
- Difficult to track county impact
- Difficult to assemble & distribute data

and finally...

WebEOC
Key operational questions needed:

What’s happening on the ground w/in the last 24 hours?

- Level of impact experienced by a county
- What key elements are impacted?
- Identify priority and resource needs
- Rise in impact – leveling off - decreasing

What?
Where?
How bad? (level of impact)
Now what? (better/worse)
Information needed to answer these questions:

- deaths
- injuries
- persons evacuated
- sheltered
- residences damaged
- government buildings affected
- roads & bridges affected
- businesses closed
- hospitals/long term care facilities affected
- schools closed
Solution to the problem:

*ESRI’s Survey123 (browser version) connected to Juvare’s WebEOC for reporting*

https://arcg.is/vGKzy

https://webeoc.kyemweb.com:8232/eoc7/
Specific incident:

**February - March 2019 flooding event (DR-4428)**

- Over $125 million in damages
- 55 counties reported
- 229 reports
The next step – rolling up the data:
Questions?
FEMA Response Planning and Exercise Division

Chris Vaughan, Geospatial Information Officer, FEMA
Disaster Dashboards

Ending Analysis Paralysis by Implementing Best Practices in Your Dashboards

InSPIRE 2019
**Incident Journals**

**Hurricane**
- FEMA Hurricane Incident Journal
- Links: [FEMA](https://disasters.geoplatform.gov), [FEMA](https://fema.maps.arcgis.com)

**Flood**
- FEMA Flood Incident Journal
- Links: [FEMA](https://disasters.geoplatform.gov), [FEMA](https://fema.maps.arcgis.com)

**Tornado**
- FEMA Tornado Incident Journal
- Links: [FEMA](https://disasters.geoplatform.gov), [FEMA](https://fema.maps.arcgis.com)

**Wildfire**
- FEMA Wildfire Incident Journal
- Links: [FEMA](https://disasters.geoplatform.gov), [FEMA](https://fema.maps.arcgis.com)

**Earthquake**
- FEMA Earthquake Incident Journal
- Links: [FEMA](https://disasters.geoplatform.gov), [FEMA](https://fema.maps.arcgis.com)

**Links:**
- [https://disasters.geoplatform.gov](https://disasters.geoplatform.gov)
- [https://fema.maps.arcgis.com](https://fema.maps.arcgis.com)
Community Lifelines

**A Construct for Objectives-Based Stabilization Efforts**

A lifeline enables the continuous operation of **critical government and business functions and is essential to human health and safety or economic security.**

- Lifelines are the most fundamental services in the community that when stabilized enable all other aspects of society.
- Lifelines exist during steady-state and are normally provided by sources organic to the community.
- When disrupted, decisive intervention (e.g., rapid service re-establishment or employment of contingency response solutions) is required.

Draft Version 2.0
Community Lifeline Dashboard Capability Development Phase

1. Development
- Initial Planning
  - Identify capability Owner
  - Capture & Define requirements
  - Define & Identify stakeholders/audiences
  - Identify Dashboard Champion/Advocate
  - Scope resource requirements/communicate shortfalls
  - Form project work team & Select team member with required skills
  - Prioritize Dashboard Development
  - Assign dashboard & tasks to the appropriate team member
  - Develop QA & QC Plan
  - Develop project plan
- Dashboard Focus Areas
  - Data (Static & Live)
  - Dashboard creation
  - Design
  - Outreach & Coordination

2. Production
- Process improvements from lesson learn, incident response activation & feedback
- Integration of additional live and near real-time data (operational status)
- Design & functional improvements
- Requirements change & update

3. Transformation / Optimization
- Paradigm Shift / Total information requirement change
- Platform innovation (Dashboards, Infographics, AI)
- Managed & Integrated transactional incident information (Live & near real-time data) / Predictions
- Full integration into organization (program areas) business workflows
CONOPS | Prioritizing Operational Support and Resource Requirements

Conceptual Model Framework

Hazard and intensity
Coastal Surge
Wind

Structural Impacts
Built Environment

Modeling
Damage Functions

Population vulnerability
American Community Survey

Exposure and impacts
Remote Sensing

Results: 48-24hrs pre landfall

Results: 24-72hrs post landfall

Estimated Resource Requirements:

Damage Functions

Trend Analysis:
Questions?
International Association of Fire Chiefs

Chief Jeff Dulin, Strategic Advisor, International Association of Fire Chiefs
The National Mutual Aid System

NMAS
Request. Locate. Deploy.

Powered by [Logos of different companies]
Evolution over Time
Technology For the Emergency Services

Today WebGIS and other Technologies provide the Emergency Services the capability to support Information Sharing From Pre-planning through Demobilization of Resources. Providing the Right Information to The Right Audience Is The Key!
<table>
<thead>
<tr>
<th>Department</th>
<th>Resource Identifier</th>
<th>Chief's Name</th>
<th>Chief's Phone Number</th>
<th>Station Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Springdale FD</td>
<td>Springdale - E1</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - E2</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - E3</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - E4</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - E5</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - E6</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - E7</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - E8</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - E9</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - E10</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - MED1</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - MED2</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - MED3</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - MED4</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - MED5</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - MED6</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - MED7</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - MED8</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - MED9</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Springdale - MED10</td>
<td>Homer Roberts</td>
<td>479-221-3456</td>
<td>479-342-2211</td>
</tr>
<tr>
<td></td>
<td>Fayetteville FD</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - E1</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - E2</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - E3</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - E4</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - E5</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - E6</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - E7</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - E8</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - E9</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - E10</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - MED1</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - MED2</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - MED3</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - MED4</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - MED5</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - MED6</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - MED7</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - MED8</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - MED9</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Fayetteville - MED10</td>
<td>Bobby King</td>
<td>479-221-3456</td>
<td>479-876-2745</td>
</tr>
<tr>
<td></td>
<td>Rogers FD</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - L1</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - E2</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - E3</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - E4</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - E5</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - E6</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - E7</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - E8</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - E9</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - E10</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - MED1</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - MED2</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - MED3</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - MED4</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - MED5</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - MED6</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - MED7</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - MED8</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - MED9</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
<tr>
<td></td>
<td>Rogers - MED10</td>
<td>Tommy Jenkins</td>
<td>479-221-3456</td>
<td>479-221-3456</td>
</tr>
</tbody>
</table>
Welcome to the Resource Typing Library Tool (RTLT), an online catalogue of national resource typing definitions, position qualifications and Position Task Books (PTBs) provided by the Federal Emergency Management Agency (FEMA) National Integration Center (NIC).

Search Bar

- Browse
- Links & Tools
- About
- Help
<table>
<thead>
<tr>
<th>Org Id</th>
<th>Resource Name</th>
<th>Type</th>
<th>Identifier</th>
<th>Category</th>
<th>Resource Status</th>
<th>Availability</th>
<th>Response Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>FL-301</td>
<td>Bomb Response Team</td>
<td>Type 1</td>
<td></td>
<td>Law Enforcement Operations</td>
<td>Available</td>
<td>Region</td>
<td>Immediate Need (within 30-mins)</td>
</tr>
<tr>
<td>FL-301</td>
<td>Bomb Response Team</td>
<td>Type 1</td>
<td></td>
<td>Law Enforcement Operations</td>
<td>Available</td>
<td>Region</td>
<td>Immediate Need (within 30-mins)</td>
</tr>
<tr>
<td>FL-302</td>
<td>Bomb Response Team</td>
<td>Type 1</td>
<td></td>
<td>Law Enforcement Operations</td>
<td>Available</td>
<td>Region</td>
<td>Initial Attack (ASAP)</td>
</tr>
<tr>
<td>FL-302</td>
<td>Bomb Response Team</td>
<td>Type 1</td>
<td></td>
<td>Law Enforcement Operations</td>
<td>Available</td>
<td>Region</td>
<td>Initial Attack (ASAP)</td>
</tr>
<tr>
<td>FL-303</td>
<td>Bomb Response Team</td>
<td>Type 1</td>
<td></td>
<td>Law Enforcement Operations</td>
<td>Available</td>
<td>Region</td>
<td>Immediate Need (within 30-mins)</td>
</tr>
<tr>
<td>FL-306</td>
<td>Bomb Response Team</td>
<td>Type 1</td>
<td></td>
<td>Law Enforcement Operations</td>
<td>Available</td>
<td>Statewide</td>
<td>Immediate Need (within 30-mins)</td>
</tr>
<tr>
<td>FL-306</td>
<td>Bomb Response Team</td>
<td>Type 1</td>
<td></td>
<td>Law Enforcement Operations</td>
<td>Available</td>
<td>Statewide</td>
<td>Immediate Need (within 30-mins)</td>
</tr>
<tr>
<td>FL-307</td>
<td>Bomb Response Team</td>
<td>Type 1</td>
<td></td>
<td>Law Enforcement Operations</td>
<td>Available</td>
<td>Statewide</td>
<td>Immediate Need (within 30-mins)</td>
</tr>
<tr>
<td>FL-307</td>
<td>Bomb Response Team</td>
<td>Type 1</td>
<td></td>
<td>Law Enforcement Operations</td>
<td>Available</td>
<td>Statewide</td>
<td>Immediate Need (within 30-mins)</td>
</tr>
<tr>
<td>FL-310</td>
<td>Bomb Response Team</td>
<td>Type 1</td>
<td></td>
<td>Law Enforcement Operations</td>
<td>Available</td>
<td>Statewide</td>
<td>Immediate Need (within 30-mins)</td>
</tr>
<tr>
<td>FL-310</td>
<td>Bomb Response Team</td>
<td>Type 1</td>
<td></td>
<td>Law Enforcement Operations</td>
<td>Available</td>
<td>Statewide</td>
<td>Immediate Need (within 30-mins)</td>
</tr>
<tr>
<td>FL-311</td>
<td>Bomb Response Team</td>
<td>Type 1</td>
<td></td>
<td>Law Enforcement Operations</td>
<td>Available</td>
<td>Statewide</td>
<td>Immediate Need (within 30-mins)</td>
</tr>
<tr>
<td>FL-312</td>
<td>Bomb Response Team</td>
<td>Type 1</td>
<td></td>
<td>Law Enforcement Operations</td>
<td>Available</td>
<td>Statewide</td>
<td>Immediate Need (within 30-mins)</td>
</tr>
</tbody>
</table>
### Organizations List

<table>
<thead>
<tr>
<th>Organization</th>
<th>Available Quantity</th>
<th>Requested Quantity</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>FL-Gainesville Police Department</td>
<td>2</td>
<td>0</td>
<td>3.56</td>
</tr>
<tr>
<td>Jacksonville Sheriff's Office</td>
<td>2</td>
<td>0</td>
<td>59.21</td>
</tr>
<tr>
<td>FL-Orange County Sheriff's Office</td>
<td>2</td>
<td>0</td>
<td>93.40</td>
</tr>
<tr>
<td>FL-Orlando Police Department</td>
<td>2</td>
<td>0</td>
<td>84.76</td>
</tr>
<tr>
<td>FL-Hillsborough County Sheriff's Office</td>
<td>2</td>
<td>0</td>
<td>118.62</td>
</tr>
<tr>
<td>FL-Tampa Police Department</td>
<td>2</td>
<td>0</td>
<td>119.63</td>
</tr>
<tr>
<td>FL-Tallahassee Police Department</td>
<td>1</td>
<td>0</td>
<td>131.07</td>
</tr>
<tr>
<td>FL-Broward County Sheriff's Office</td>
<td>3</td>
<td>0</td>
<td>276.43</td>
</tr>
<tr>
<td>FL-Miami-Dade Police Department</td>
<td>2</td>
<td>0</td>
<td>292.21</td>
</tr>
<tr>
<td>FL-Atlanta Police Department</td>
<td>1</td>
<td>0</td>
<td>297.15</td>
</tr>
<tr>
<td>NC-Charlotte-Mecklenburg Police Department</td>
<td>1</td>
<td>0</td>
<td>391.16</td>
</tr>
<tr>
<td>TN-Emergency Management</td>
<td>3</td>
<td>0</td>
<td>513.37</td>
</tr>
<tr>
<td>VA-Virginia EM</td>
<td>3</td>
<td>0</td>
<td>602.85</td>
</tr>
<tr>
<td>MO-Missouri EM</td>
<td>3</td>
<td>0</td>
<td>829.45</td>
</tr>
</tbody>
</table>
NMAS Incident Dashboard

Active Incidents

- **Highway 70 Avalanche**
  - 4/12/2019, 11:26 PM
  - Authority: CO-Boulder County EM
  - IC: Charles N. Charge

- **American Crash**
  - 3/30/2019, 5:23 AM
  - Authority: Salem Fire Rescue
  - IC:

- **Highway 81 MVA**
  - 3/29/2019, 12:00 AM
  - Authority: IC:

- **Animal Outbreak**
  - 2/27/2019, 1:23 AM
  - Authority: FL-State Fire Marshal
  - IC:

- **Hurricane Cassie**
  - 2/14/2019, 8:25 AM

All Resources

1,915

Last update: a few seconds ago

Incident Summary

- Airplane Crash: 1
- Hurricane: 1
- Avalanche: 1
- Building Collapse: 1
- Flood: 1
- Animal Diseases Outbreak: 1
- Multi-Casualty Incident: 1
- Structure Fire: 1
- Wildfire: 1

Availability | Fire and Hazmat Resources

- Fire and Hazmat
- EMS
- SAR
- Law Enforcement
- Incident Management

Map showing the availability of resources across the United States.
National Mutual Aid System (NMAS)

The National Mutual Aid System (NMAS) takes mutual aid to the next level, creating a system where all users can access cutting-edge technology to request, geospatially locate and strategically deploy response resources.

System is operational, no service disruptions

NMAS is operational in support of the National Mutual Aid Technology Exercise (NMATE)
The National Mutual Aid System

Jeff Dulin, IAFC Strategic Advisor
jdulin@iafc.org
Questions?
Thank you!

NAPSG Foundation Contact: Your Name email@publicsafetygis.org