

Geo-Enable Your Plans: From Binders to Interactive Web-Based Plans



November 12, 2019

National Alliance for Public Safety GIS (NAPSG) Foundation

napsfoundation.org | [@napsfoundation](https://twitter.com/napsfoundation)

Objectives

- Become familiar with the concepts and advantages of Deliberate and Crisis Action Geo-enabled plans.
- Gain insight into different types of plans and approaches for geospatial integration.
- Test the process of developing a Geospatial Game Plan to inform geo-enabled plan development.
- Gain best practices and lessons learned from geospatial practitioners and thought leaders who have developed and garnered support for geo-enabling information and plans for their organizations.

Agenda

- What is geo-enabling and what is the real-world problem they can solve?
- Typical Emergency Management Plans
 - Deliberate and Crisis (Incident) Action Plans
 - Geospatial Analysis and Integration
 - Panel Discussion: The Planning Process for Geo-Enabling – **Eva Cante and Ian Purcell, FEMA R1 and Rob Long, FEMA Office of the Administrator**
- Developing a Geospatial Game Plan for Implementation and Readiness
 - Core Information Requirements, by:
 - Community Lifeline / Hazard / Timeline / Audience / Method of Delivery
 - Engaging Mission Partners
- Transitioning from Deliberate to Crisis Action Plans
 - Presentation: **Matt Welshans, FEMA N-IMAT**
 - Presentation: **Jason Ray, FL Division of Emergency Management**
 - Presentation: **Eric Shreve, AZ Department of Emergency and Military Affairs**
- Where to Start?

Key Links

- This session has been **Geo-Enabled**! View the interactive version during the session.
<http://bit.ly/2NCs50j>
- Know of any Geo-Enabled Plans? Please share them with the group!
<https://arcg.is/1zmaSj0> or



Why Geo-Enabling?

What is the real-world problem?

- **Unwieldy Text Documents**
 - Plans are often massive text documents that sit in a binder or PDF.
 - Time-consuming to read in its entirety.
 - Result: Staff and Mission Partners *may* only be “familiar” with their specific role and responsibilities
- **Currency**
 - Immediately outdated when printed
- **What you see is what you get**
 - Limited ability to dig deeper and conduct further analysis
 - Format precludes cross-pollination with other relevant plans or neighboring jurisdictional plans.
- **Limited accessibility**
 - Binder in-hand
 - Rich data used and produced as a result are viewable in static tables and map images
 - Single audience – External (Everyone) or Internal

Geo-Enabling

What can geo-enabling do?

- **Pull out key information with the ability to dig deeper**
 - Information **lives** in a **dynamic** environment.
 - Distilled content can be viewed and consumed rapidly
 - Result:
 - Staff and Mission Partners become familiar with their and their mission partner roles.
 - Informed Public
- **Currency.**
 - Data and information can be **updated continuously**.
- **What you see is more than just the plan's findings or assigned roles.**
 - Ability to dig deeper and **conduct further analysis** – What if XYZ changes, then what?

✓ Supports immediate socialization and transition to operations when needed

✓ Updated based data (buildings, population) & Live Feeds (forecasted storm path)

✓ Informs course of action analysis

Typical Plans

Emergency Management Plans

- **Deliberate** = Blue Skies
 - **Hazard Mitigation** – Process to understand risks from natural hazards and develop long-term strategies that will reduce the impacts of future events on people, property, and the environment.
 - **Threat Hazard Identification Risk Assessment (THIRA) /Stakeholder Preparedness Review (SPR)** - Common risk assessment process that helps the whole community to understand its risks and estimate capability requirements to address those risks.
 - **Debris Management** - Plan for coordinating and managing debris removal operations that prepares a jurisdiction to restore public services and ensure public health and safety in the aftermath of a disaster.
 - **Emergency Operations Plans** - describes a government-level approach to emergency operations.
- **Crisis Action** = Grey Skies
 - **Incident Action Plans** - Produced from the incident action planning process and defines the incident objectives for the next operational period of an incident.
 - **Others?** Sheltering, Mass Casualty, Evacuation, ...?

Hazard Mitigation Plans

Areas for Geospatial Integration

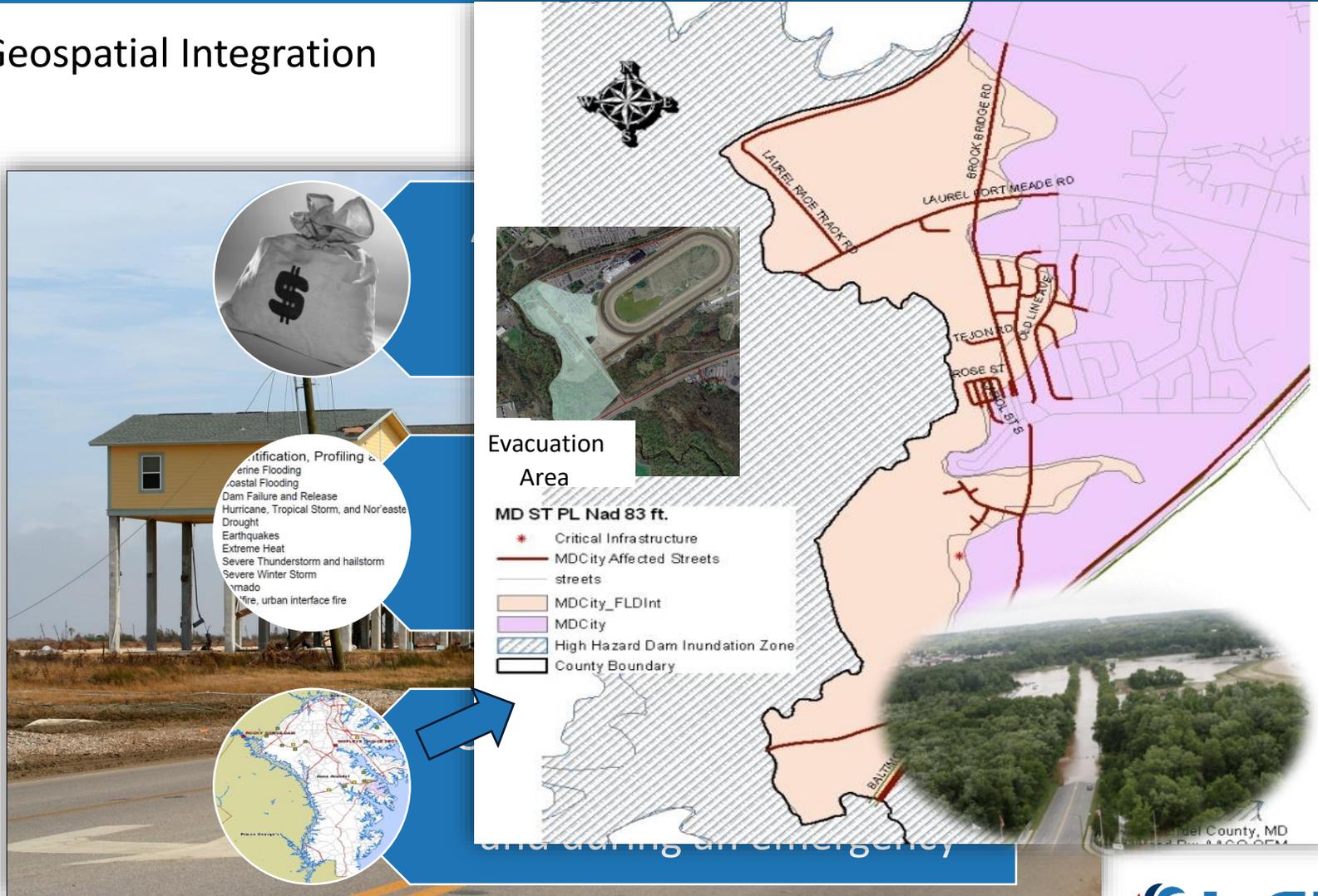
- **Create an Outreach Strategy** – Target neighborhoods with increased risk
- **Review Community Capabilities** – Conduct an assessment of existing plans, policies, studies, and programs to further inform the mitigation actions that will be identified through the planning process.
- **Conduct a Risk Assessment**
 - Describe Hazards
 - Identify Community Assets
 - Analyze Risk
 - Summarize Vulnerability
- **Develop a Mitigation Strategy** – Models and analysis to mitigate impacts from future events

Mitigation Core Capabilities

Prevention	Protection	Mitigation	Response	Recovery
Planning				
Public Information and Warning				
Operational Coordination				
Intelligence and Information Sharing		Community Resilience Long-term Vulnerability Reduction Risk and Disaster Resilience Assessment Threats and Hazards Identification	Infrastructure Systems	
Interdiction and Disruption			Critical Transportation	Economic Recovery
Screening, Search, and Detection			Environmental Response/Health and Safety	Health and Social Services
Forensics and Attribution	Access Control and Identity Verification	Risk and Disaster Resilience Assessment Threats and Hazards Identification	Fatality Management Services	Housing
	Cybersecurity		Fire Management and Suppression	Natural and Cultural Resources
	Physical Protective Measures		Logistics and Supply Chain Management	
	Risk Management for Protection Programs and Activities		Mass Care Services	
	Supply Chain Integrity and Security		Mass Search and Rescue Operations	
			On-scene Security, Protection, and Law Enforcement	
			Operational Communications	
			Public Health, Healthcare, and Emergency Medical Services	
			Situational Assessment	

Hazard Mitigation Plans

Areas for Geospatial Integration



FEMA/Greg Henshal

Hazard Mitigation Plans

City of Tulsa Hazards

City of Tulsa Hazard Mitigation Plan



- Welcome
- 1. High Wind and Tornado
- 2. Flooding
- 3. Dam/Levee Breach
- 4. Expansive Soils
- 5. Wildfire
- 6. Critical Facilities
- 7. Storm Sirens
- Mitigation Strategies
- 1986 Arkansas River Flood
- Browse Hazard Data

City of Tulsa Hazard Mitigation Plan

Welcome to the City of Tulsa's Hazard Mitigation Plan Website. The purpose of the website is to educate the public and provide information to help the public prepare for the disasters that affect Tulsa.

The Tulsa Hazard Mitigation Plan analyzed 12 classes of hazards. Of those; Drought, Hail, Lightning, Extreme Heat, Winter Storm Impact, and Earthquakes do not have mappable elements. They are not presented here, please see the plan for more information.

How to use the Website

The tools and navigation buttons are shown below:



Viewer navigation tools and tabs

Viewer Hazard Tabs:

The Hazard Mitigation Plan Viewer has divided the data for Tulsa's hazards into individual tabs. A click on any tab will take the user to the datasets and information available for that particular hazard.

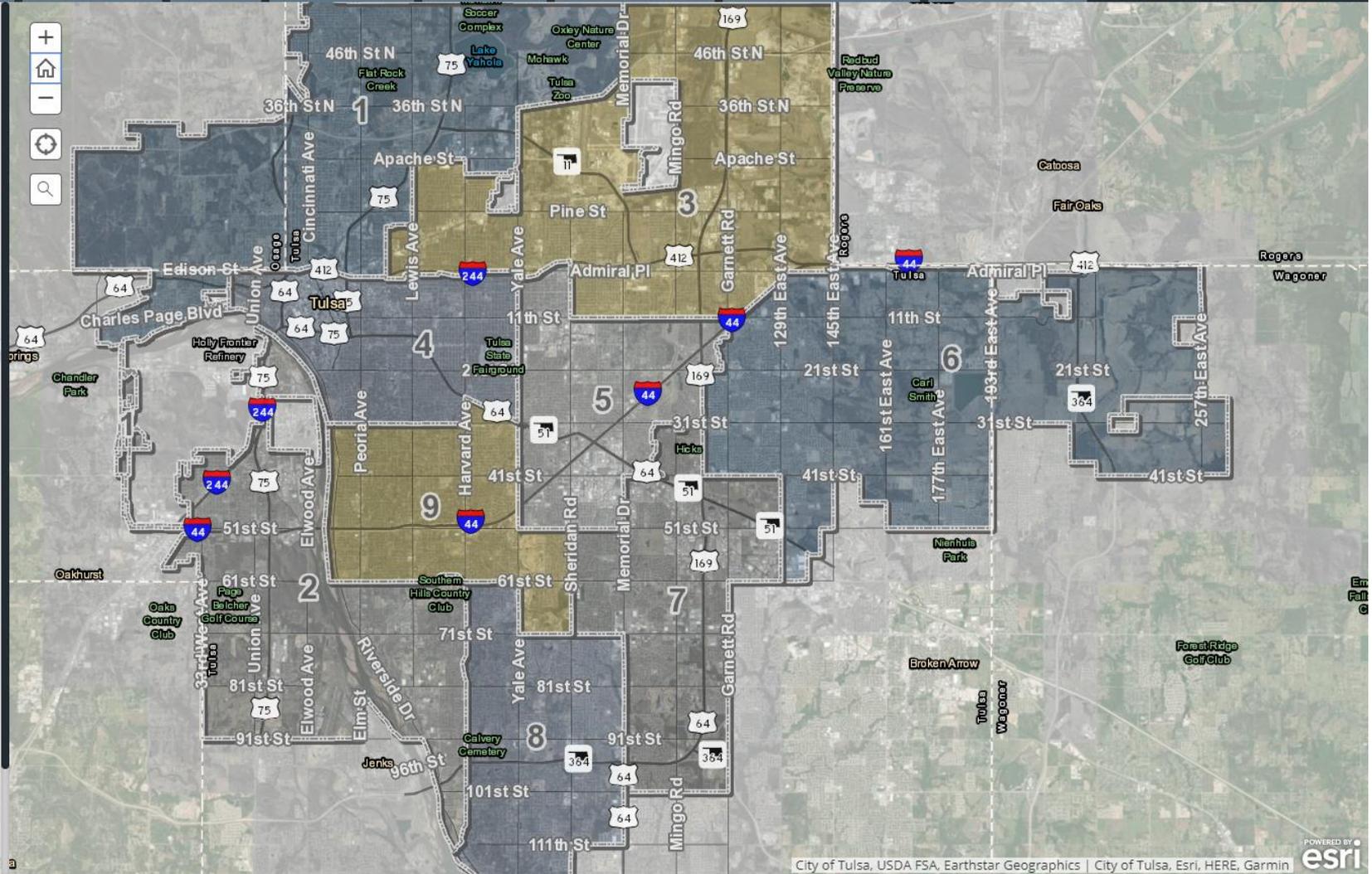
Navigation Buttons:

This is the general navigation toolbar. The user can use a scroll mouse to zoom in or out of the Viewer and point and drag the cursor to pan around the map. The + and - tools zoom in or out one level based on positive (zoom in) or negative (zoom out). The home button returns the map to original extent when the Viewer first opens.

GPS Locator Button:

This button is the GPS location to locate the map user at their location. If accessing from a mobile device, location services will have to be turned on for their web browser for the GPS location feature to work.

Address Search Tool:



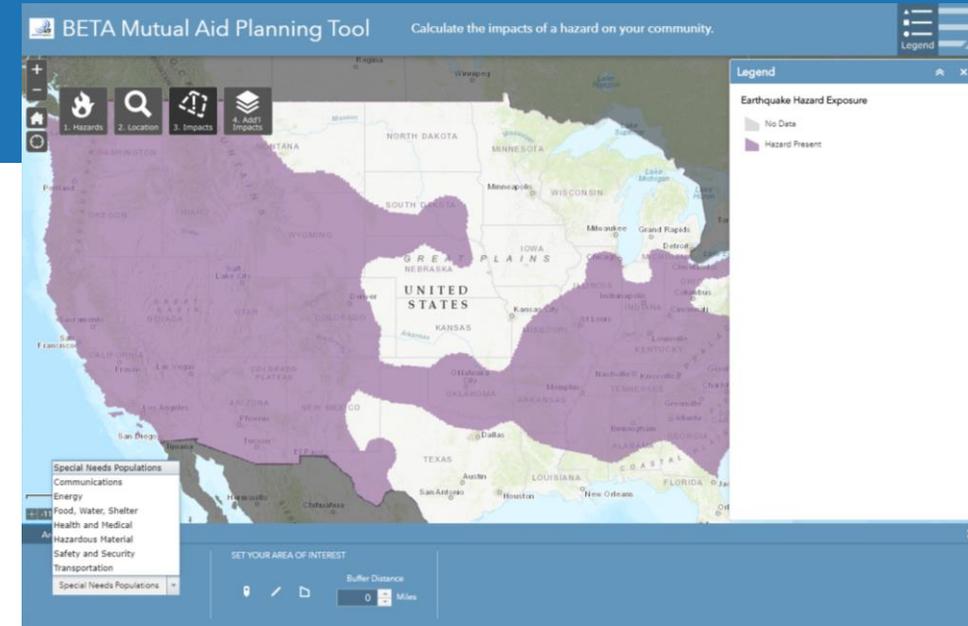
THIRA / SPR

- **Identify the Threats and Hazards of Concern**
 - What Natural, Technological, and Human-Caused hazards that could impact our community
- **Give the Threats and Hazards Context**
 - If they occurred, what impacts would those threats and hazards have on a community?
- **Establish Capability Targets**
 - Based on those impacts, what capabilities should our community have?

Natural	Technological	Human-Caused
Avalanche	Airplane Crash	Biological Attack
Animal Disease Outbreak	Dam Failure	Chemical Attack
Drought	Levee Failure	Explosion
Earthquake	Mine Accident	Radiological Attack
Epidemic	HAZMAT	Sabotage
Flood	Power Failure	School and workplace violence
Hurricane	Radiological Release	
Landslide	Train Derailment	
Pandemic	Urban Conflagration	
Tornado		
Tsunami		
Volcanic Eruption		
Wildfire		
Winter Storm (severe weather)		

THIRA / SPR

- Identify the Threats and Hazards of Concern
 - What Natural, Technological, and Human-Caused hazards that could impact our community
- Give the Threats and Hazards Context
 - If they occurred, what impacts would those threats and hazards have on a community?
- Establish Capability Targets
 - Based on those impacts, what capabilities should our community have?



Community Lifelines



THIRA / SPR

- Identify the Threats and Hazards of Concern
 - What Natural, Technological, and Human-Caused hazards that could impact our community
- Give the Threats and Hazards Context
 - If they occurred, what impacts would those threats and hazards have on a community?
- Establish Capability Targets
 - Based on those impacts, what capabilities should our community have?

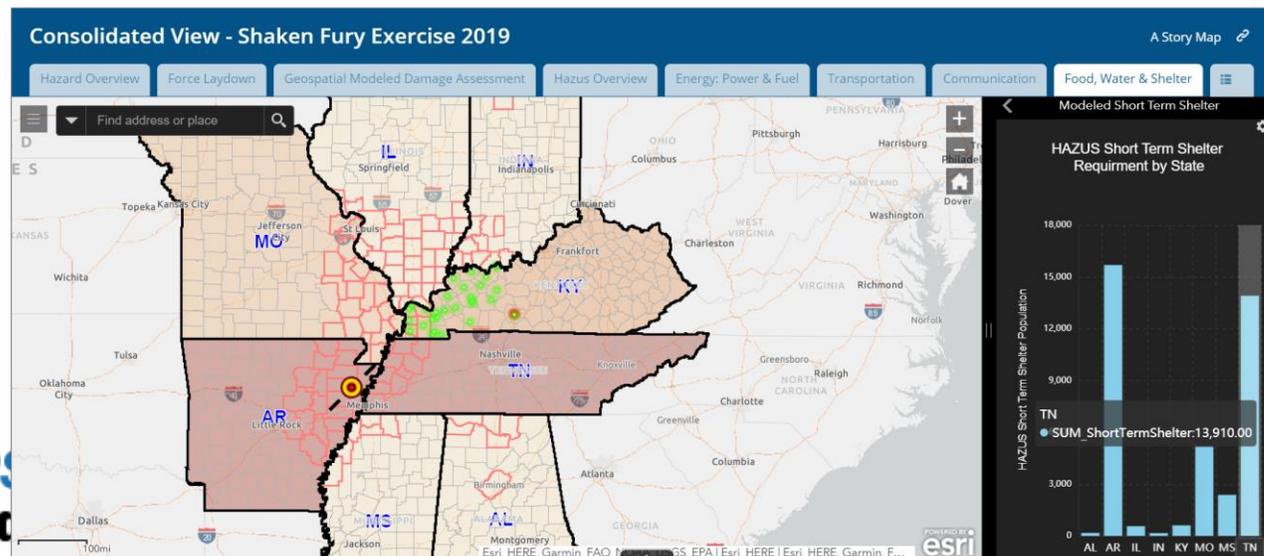
Example

Threat/Hazard: Earthquake

Threat/Hazard Type	Earthquake
Context Description	A 7.7 magnitude earthquake delivers catastrophic impacts across Western Tennessee during a harsh winter.

Standardized Impacts

Standardized Impact	Value	Standardized Impact	Value
(#) jurisdictions affected	###	(#) partner organizations involved in incident management	###
(#) people affected	###	(#) people with access and functional needs (affected)	###
(#) people with limited English proficiency affected	###	(#) customers (without water service)	###
(#) customers (without wastewater service)	###	(#) customers (without communication service)	###
(#) customers (without power service)	###	(#) people requiring evacuation	###
(#) people with access and functional needs (requiring evacuation)	###	(#) miles of road affected	###
(#) people requiring shelter	###	(#) people requiring food and water	###
(#) people with access and functional needs (requiring accessible shelter)	###	(#) people with access and functional needs (requiring food and water)	###
(#) animals requiring shelter, food, and water	###	(#) people requiring temporary, non-congregate housing	###



Debris Management



[A Guide to Recycling Disaster Debris](#) - New Orleans, La., July, 29, 2008 — This boulevard in the Lakeview area served as a staging area for debris collection following Hurricane Katrina. In nearly three after the hurricane hit, approximately 58.8 million cubic yards of debris had been collected in Louisiana. Photo courtesy of FEMA: Greg Henshal.

Debris Management



44.9 million m³ debris



Wikipedia/Nicholas Williamson

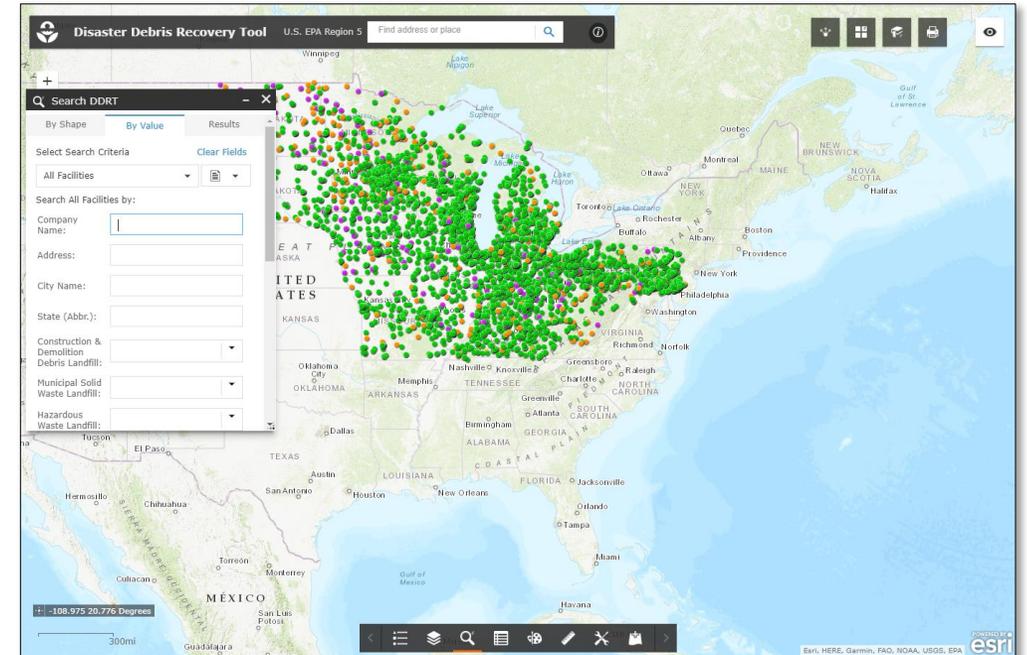


3.5 million m³ capacity

Debris Management

Areas for Geospatial Integration

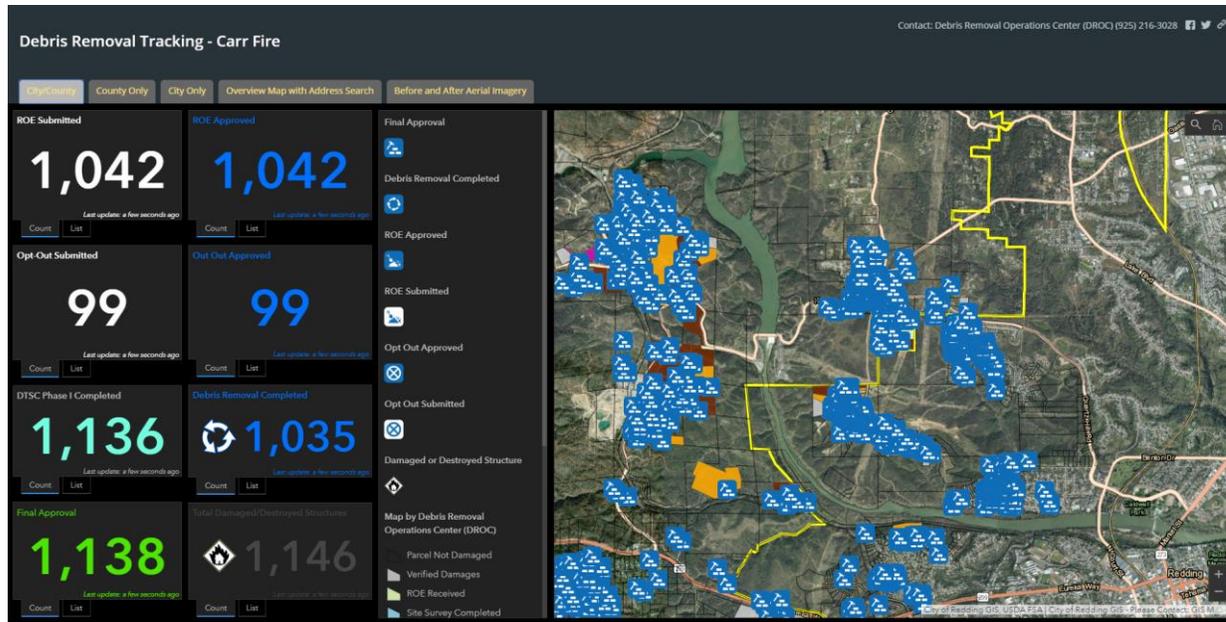
- **Forecasting the types and quantities of debris generated by potential disaster**
 - Land use and geography
 - Historical data
 - Similar Jurisdictions
 - Remote Sensing / Imagery
 - Modeling
 - [USACE \(hurricane\)](#)
 - [FEMA Hazus-MH](#)
 - [EPA I-WASTE](#)
- **The debris clearance and collection activities necessary to meet the debris management needs**
 - Priorities, Response Operations, Recovery Operations
- **Identification of debris management sites**
 - Landfills – permitted waste
 - Potential Temporary Sites
 - Environmental Considerations
- **Requirement for Contracted Services**
 - Establish process to monitor activities, e.g., debris loading sites, debris management sites, debris disposal sites.
- **Public Information**
 - Disseminate (Outgoing) and Collect Information (Incoming)



<https://r5.ercloud.org/WAB/DDRT/>

Debris Management

Local Example: Debris Removal Tracking - Carr Fire



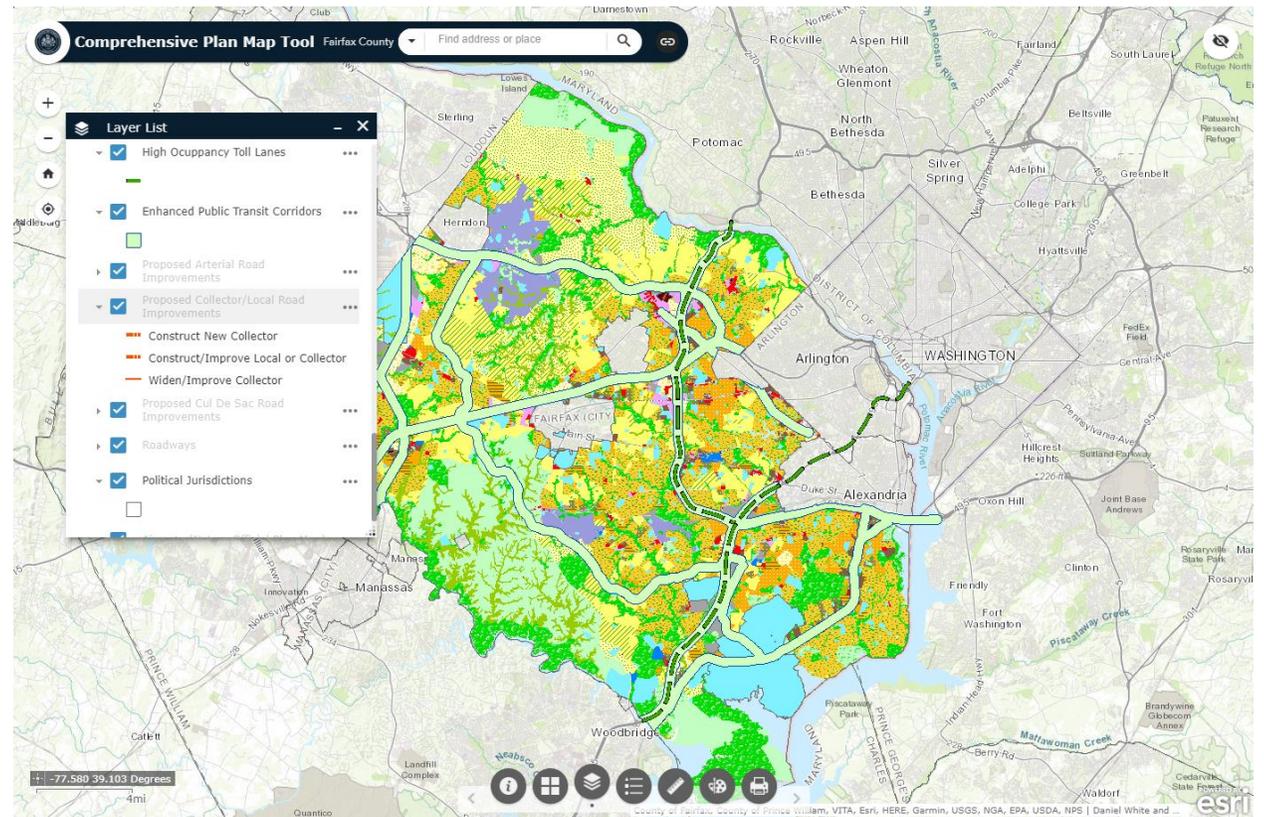
<https://arcgis.com/zDeWe>



Debris Reporting – ArcGIS Solutions for Emergency Management

Non-Emergency Management Plans

- Comprehensive Plan - A guide to decision-making about the natural and built environment
- Transportation
- Capital Improvement
- Historic Preservation
- ...?



NAPSG InSPIRE Summit Region I Geo-enabling Plans



FEMA

Eva Cante & Ian Purcell
FEMA Region I
Response Division, Planning Branch
November, 2019

Geo-enabling Plans

- Examples - All Hazards Plan, Power Outage Incident Annex
- **Planning Stage** –
 - Understand the plan you've been asked to geo-enable
 - Understand your stakeholders needs (What vision might they have? Specific data sets? Tools?)
- **Design** –
 - StoryMap vs Dashboard vs Application – What will best bring the plan to life?
 - Seek 'out of the box' application templates before creating custom apps
 - Remember best practices
 - Should be user friendly and accessible
 - Does **NOT** need to be an all-in-one application
- **Develop!**
- **Stay engaged** with your stakeholder through the whole process!!

Transition to Crisis Action Plans

Real-World Problem – How do you develop decision support tools to answer the questions being asked at different phases of an incident?

During Preparedness “Blue Skies” - Starting with the data and analysis developed in your deliberate plans, work through the core information requirements and geospatial information needed to support each phase.

- Hazards - Where is there hazard potential?
- Impacts - Where are the most vulnerable populations, community lifelines?
Thresholds for action?
- Resources – What do we have/need? Where is it?

Transition to Crisis Action Plans

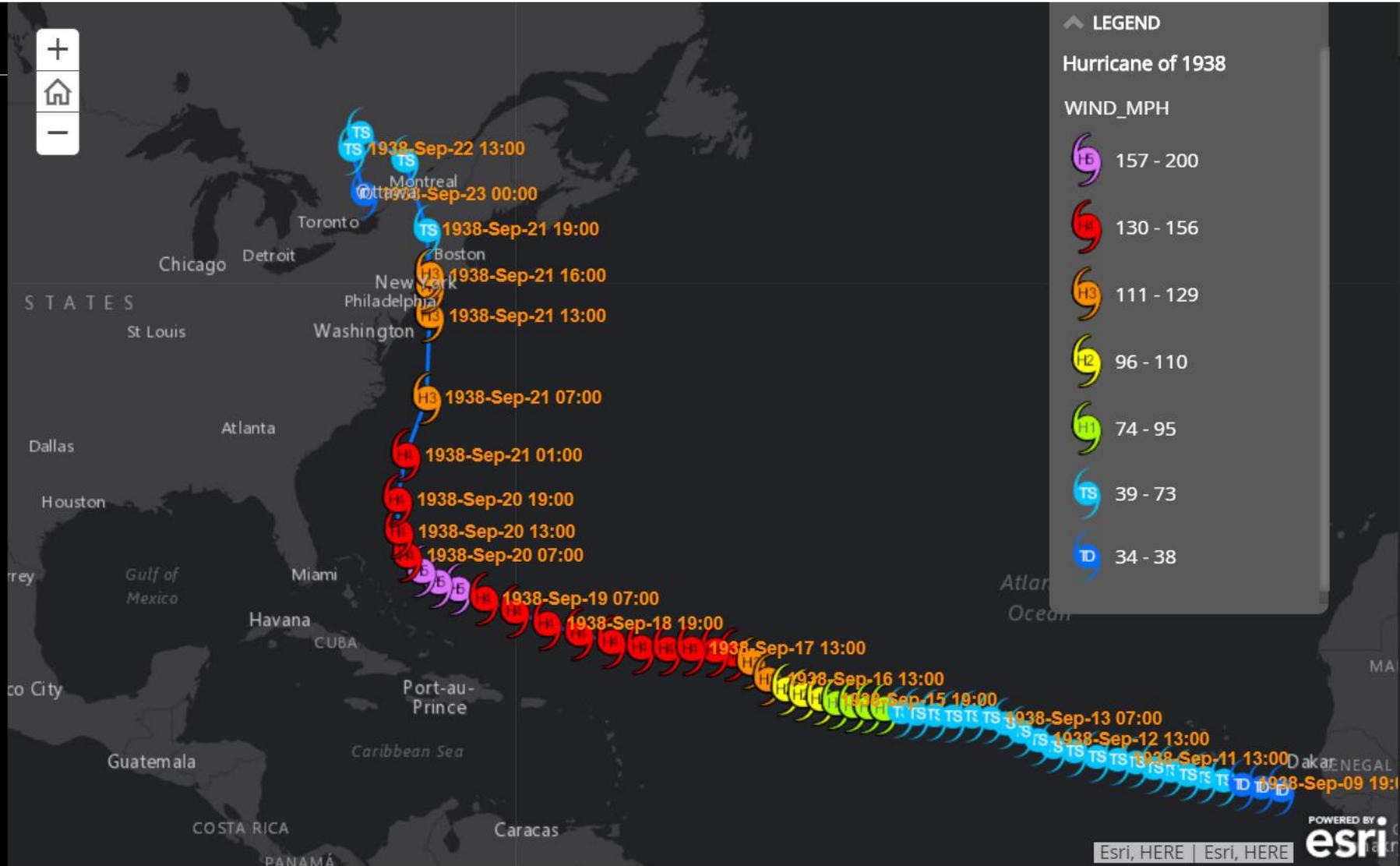
FEMA Region 1 Operationa...    

Hurricane of 1938 Scenario

Scenario Journal

This journal presents the FEMA GeoFramework web map collection for hurricanes and hurricane-like events. This journal is presenting the information and analysis of the 1938 scenario for the 2016 revision of the FEMA Region 1 Hurricane Response Annex.

1. Hazard Overview



Geo-Enabling Plans

Content

Home | Grants Portal | Concur | SmartPay2 Login | ESD - Wireless LAN | FEMA | N-IMAT-E-1 Intranet | FEMA GeoPlatform | REST Services | Citi Commercial Cards | NTI | AIRS | IEM :: NWS Watch War... | Daily Situational Awar...

Test Incident Journal Journal

No issues detected x Edit

esri

Vero Beach, FL

The Bahamas

Cuba

Haiti

Dominican Republic

About This Journal

How To Use The Incident Map Journal

Communications Lifeline

<https://fema.maps.arcgis.com/apps/MapSeries/index.html?appid=fe8c84c4f1fe4a65bbe8c6314dee4a3e>
(log-in required)

Incident Journal

- Still in beta phase
- Added lifelines in 2018 hurricane season
- Adaptable to various disaster types and sizes
- Various state and local data available on AGOL can also be brought in
- Updateable through Journal Creator Script (Josh Keller, R-X)

Transition to Crisis Action Plans



Hurricane Dorian-Florida Journal

About This Journal

Incident Characterization

Planning Summary

Weather

Modeling and Imagery

- Storm Surge Models
- Prioritizing Operations Support Tool (POST) Dashboard

Modeling/Imagery/Damage Assessments

Non-Storm Surge Inundation

POST Dashboard

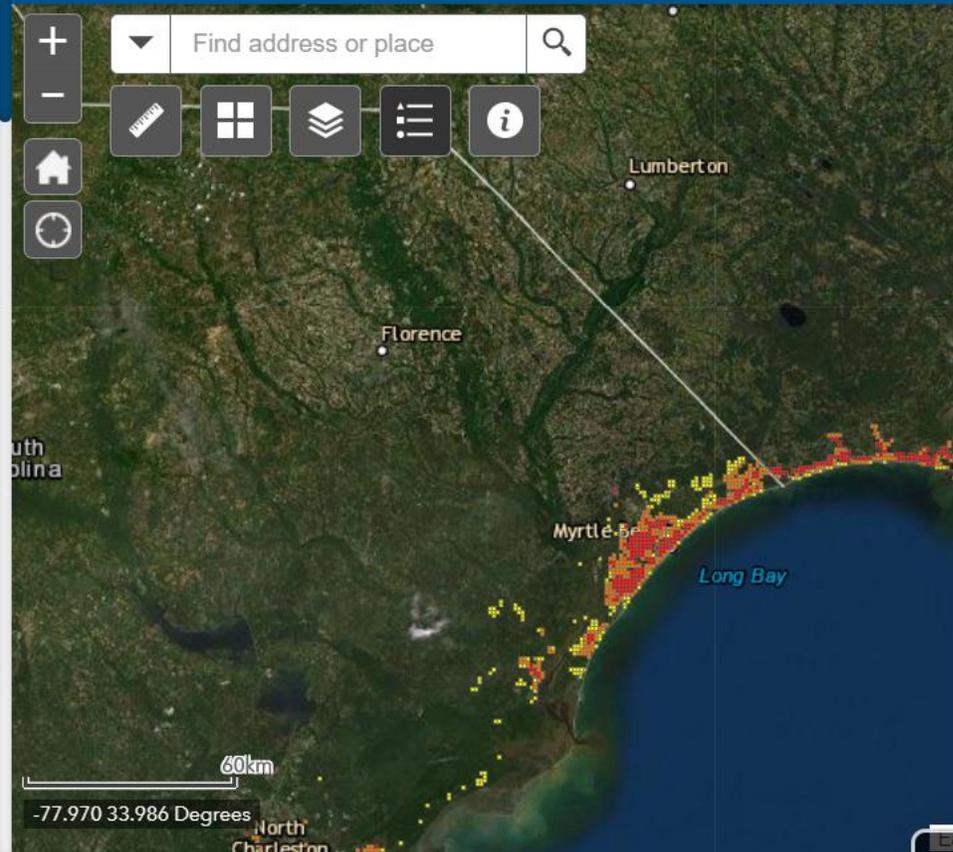
VIIRS Floodwater Fraction Map

Public Camera Feed

Crowdsources Images

FEMA AOIs for Satellite Collection

(Determined using POST - P



Legend

USNG 1KMCellsWithPriorities SC

Collection_Priority_Weighted



USNG1KMCellsWithPriorities NC

Collection_Priority_Weighted



wwa_meteocean_tropicalcyclones_trackintensityfcsts_time

Atlantic, Central Pacific and Eastern Pacific Ocean Regions

Tropical Cyclone Track and Intensity Forecasts

Tropical Cyclone Watches and Warnings for Coast

- Hurricane Watch
- Hurricane Warning
- Tropical Storm Watch
- Tropical Storm Warning

Geospatial Game Plan

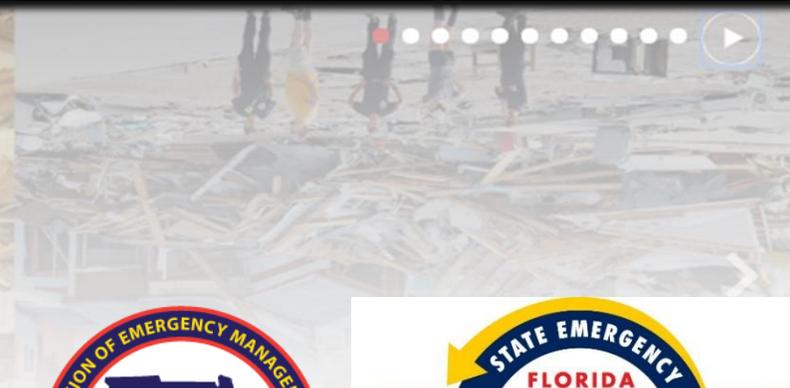
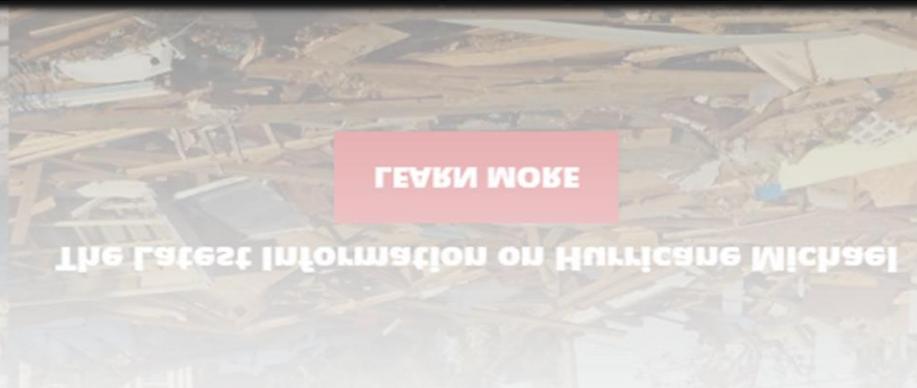
Sample questions for creating a geospatial game plan for your agency.

Lifeline	Core Info Need	Public	First Responders	Emergency Managers	Operational Game Plan	Technical Game Plan
	Shelter Status	Where can I go to be safe?	Where do I take / direct evacuees?	Where are the evacuees? Do we have enough room?	Mass Care Lead and Red Cross will update the status of shelters.	The Master Feature Layer can be edited from web apps or Collector for ArcGIS (offline). The Hosted Feature Layer View, filtered for status = open, is embedded in the Public Information Map.



The Latest Information on Hurricane Michael

LEARN MORE



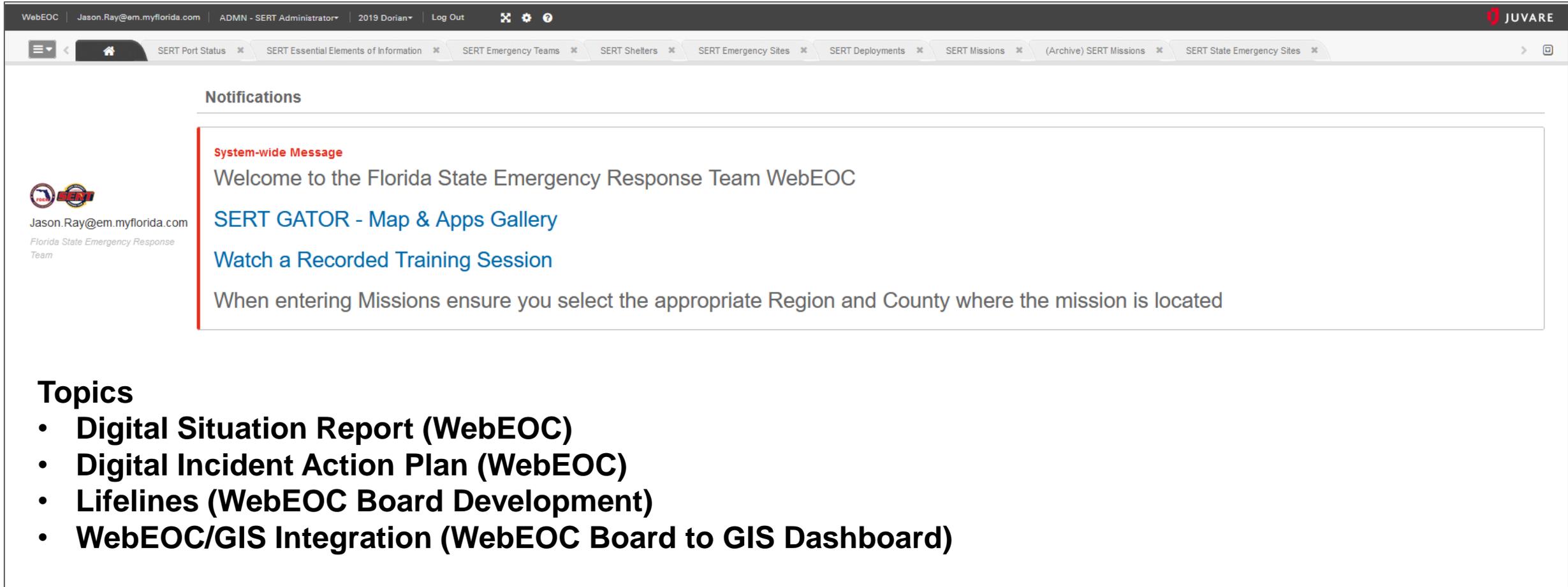
The Latest Information on Hurricane Michael

LEARN MORE

Jason Ray
Jason.Ray@em.myflorida.com
GIS Administrator/Acting Chief Information Officer
FDEM – Interim Information Technology and Management Bureau Chief
SERT – Technical Services Branch Director/State GIS Manager
850-815-4730



FDEM WebEOC



The screenshot displays the FDEM WebEOC interface. At the top, the browser address bar shows the user is logged in as Jason.Ray@em.myflorida.com. The navigation menu includes various system components like SERT Port Status, SERT Essential Elements of Information, SERT Emergency Teams, SERT Shelters, SERT Emergency Sites, SERT Deployments, SERT Missions, (Archive) SERT Missions, and SERT State Emergency Sites. The main content area features a 'Notifications' section with a 'System-wide Message' that welcomes users and provides links to 'SERT GATOR - Map & Apps Gallery' and 'Watch a Recorded Training Session'. A note below the links states: 'When entering Missions ensure you select the appropriate Region and County where the mission is located'. On the left side, there is a user profile for Jason.Ray@em.myflorida.com, identified as a member of the Florida State Emergency Response Team. Below the notifications, a 'Topics' section lists four key areas: Digital Situation Report (WebEOC), Digital Incident Action Plan (WebEOC), Lifelines (WebEOC Board Development), and WebEOC/GIS Integration (WebEOC Board to GIS Dashboard).

WebEOC | Jason.Ray@em.myflorida.com | ADMN - SERT Administrator | 2019 Dorian | Log Out

JUVARE

SERT Port Status | SERT Essential Elements of Information | SERT Emergency Teams | SERT Shelters | SERT Emergency Sites | SERT Deployments | SERT Missions | (Archive) SERT Missions | SERT State Emergency Sites

Notifications

System-wide Message

Welcome to the Florida State Emergency Response Team WebEOC

[SERT GATOR - Map & Apps Gallery](#)

[Watch a Recorded Training Session](#)

When entering Missions ensure you select the appropriate Region and County where the mission is located

Jason.Ray@em.myflorida.com
Florida State Emergency Response Team

Topics

- **Digital Situation Report (WebEOC)**
- **Digital Incident Action Plan (WebEOC)**
- **Lifelines (WebEOC Board Development)**
- **WebEOC/GIS Integration (WebEOC Board to GIS Dashboard)**

FDEM WEBOC – SITUATION REPORT

Main Situation Report Info

- Incident Name
- Activation Level
- Report Number
- Date Current
- Situation Overview
- Weather Conditions
- State Actions
- Executive Order(s)
- Operational Objectives
- File Attachments
- Images/Maps

Sections

Narratives:

- Operations
- Planning
- Logistics
- Finance
- Recovery

Approved by Section Chief

Updated by Planning Section

ESFs

Narratives by each ESF
Approved by Branch Manager

Department	Last Updated	By	Approval Status	Included
Main Situation Report Info	09/05/2019 12:28			Yes
Public Information			Pending	No
Operations	09/02/2019 17:46	Nicolai Modrow	Pending	No
Planning	08/28/2019 18:10	Nicolai Modrow	Pending	No
Logistics	09/05/2019 14:38	Jennifer Rhodes-Johnson	Approved by Section Chief	No
Finance			Pending	No
Recovery	09/05/2019 14:35	Melissa Foggy	Approved by Section Chief	No
ESF-1/3 Transportation & Public Works	09/05/2019 14:08	Pamela Phillips	Approved by Branch Manager	No
ESF-2 Communications	09/05/2019 14:11	Pamela Phillips	Approved by Branch Manager	No
ESF-4/9 Fire & Search and Rescue	09/05/2019 13:41	Margaret Giani	Approved by Branch Manager	No
ESF-6 Mass Care	09/05/2019 14:52	Daniel	Approved by Branch Manager	Yes

Incident Name	SitRep #	Operational Period
2019 Dorian	8	(09/04/2019 07:00) - (19:00 09/04/2019)
2019 Dorian	7	(09/03/2019 07:00) - (19:00 09/03/2019)
2019 Dorian	6	(09/03/2019 07:00) - (19:00 09/03/2019)
2019 Dorian	6	(09/02/2019 07:00) - (19:00 09/02/2019)
2019 Dorian	5 (Corrected)	(09/01/2019 07:00) - (19:00 09/01/2019)
2019 Dorian	5	(09/01/2019 07:00) - (19:00 09/01/2019)
2019 Dorian	4 (Final)	(08/31/2019 07:00) - (19:00 08/31/2019)
2019 Dorian	4 (Revised)	(08/31/2019 07:00) - (19:00 08/31/2019)
2019 Dorian	3	(08/30/2019 07:00) - (19:00 08/30/2019)
2019 Dorian	3	(08/30/2019 07:00) - (19:00 08/30/2019)
2019 Dorian	2	(08/29/2019 07:00) - (19:00 08/29/2019)
2019 Dorian	1	(08/28/2019 07:00) - (19:00 08/28/2019)

SERT Working Situation Report Board

Lock for Review
Review & Publish

SERT Published Situation Reports Board

FDEM WebEOC – SITUATION REPORT



Situation Reports

2019 Dorian

Incident Name	SitRep #
2019 Dorian	8
2019 Dorian	7
2019 Dorian	6
2019 Dorian	6
2019 Dorian	5 (Corrected)
2019 Dorian	5
2019 Dorian	4 (Final)
2019 Dorian	4 (Revised)
2019 Dorian	3
2019 Dorian	3
2019 Dorian	2
2019 Dorian	1



Situation Report No. 8

2019 Dorian
 The Florida State Emergency Response Team
 State Emergency Operations Center Activation Level: 1
 Reporting Period: 09/04/2019 07:00 hrs - 09/04/2019 19:00 hrs
 Information Current as of 18:00 hrs

Current Situation

As of 1800 hrs EDT Wednesday, the eye of Hurricane Dorian was located about 115 miles east-northeast of Jacksonville, FL. Dorian continues to move to the north-northwest at 8 mph, parallel to the coast of Florida. Maximum sustained winds have increased to 110 mph (Category 2), but tropical storm force winds extend out 195 miles from the center and hurricane force winds 70 miles. Tropical storm conditions will continue tonight along the coast of Northeast Florida, but have ended along the Space and Treasure Coast. By sunrise, all impacts from Dorian will end as the system turns northeast and heads for the Carolinas. Some minor to moderate coastal flooding will linger into Thursday, but water levels will gradually return to normal. Tropical Storm and Storm Surge Warnings continue for Northeast Florida through this evening.

Conditions

Below are the shelter occupancy for counties with open shelters as reported in WebEOC as of 1100 hrs Open.

- Brevard: 1407
- Duval: 253
- Flagler: 202
- Glades: 6
- Indian River: 609
- Lake: 178
- Marion: 18
- Martin: 135
- Nassau: 80
- Okeechobee: 242
- Orange: 359
- Osceola: 443
- Palm Beach: 921
- Putnam: 486

Actions

- Print PDF
- Return to Dashboard

Publish Date

09/04/2019 21:06:43	View
09/03/2019 18:44:30	View
09/03/2019 18:43:41	View
09/02/2019 20:30:15	View
09/01/2019 19:54:56	View
	View

State Actions

The State EOC is activate to a Level 1 with 24 hour staffing.

Executive Orders

Executive Order Number	Date Signed	Purpose
19-189	8/28/19	See info message 43 in WebEOC
19-190	8/29/19	See info message 109 in WebEOC

Operational Objectives

1. Ensure basic needs of Florida's residents and visitors. 2. Ensure the safety of responders. 3. Promote coordination between State, Local, and SERT Partners. 4. Continue to re-evaluate risk as storm track develops. 5. Evaluate resource needs and adjust operational planning assumptions. 6. Mobilize and deploy necessary human services and logistics support to counties. 7. Prepare to minimize economic impact of the affected areas and communities. 8. Keep stakeholders, responders, and the public informed of preparedness and response activities.

Human Services Branch

ESF-11 Food and Water

ESF11 is right-sizing missions with assistance from ESF6. Further, the ESF is continually updating damage projection model, as needed and based on most recent forecasts.

ESF-15 Volunteers and Donations

FDEM WEBEOC – INCIDENT ACTION PLAN (IAP)

Logistics, Finance, Recovery, Air Operations, ESFs

- Submit Assignment List (ICS 204)
- Provide Status (Pending, In-Progress, Completed)

Additional Forms

Cover Sheet (ICS 200), Incident Briefing (ICS 201), Incident Objectives (ICS 202), Radio Communications Plan (ICS 205), Safety Message (ICS 208), Daily Meeting Schedule (ICS 230)

ASSIGNMENT LIST (ICS 204): Complete				
Incident Name Hurricane Dorian				
Operational Period		Date From: 09/06/2019	Date To: 09/10/2019	
		Time From: 07:00	Time To: 07:00	
Branch	Division/Group	Staging Area		
Emergency Services	ESF08			
Operations Personnel		Name	Contact-Number(s)	
Operations Section Chief:		undefined		
Branch Director:		Christie Luce		
Division/Group Supervisor:		Samantha Cooksey		
Resources Assigned				
Resource Identifier	Leader	# of Persons	Contact (e.g., phone, pager, radio frequency, etc.)	Reporting Location, Special Equipment and Supplies, Remarks, Notes, Information
ESF 8	Sam Cooksey	12	850-245-4878	SEOC ESF8 Breakout Room
Work Assignments				
Support the closure of special needs shelters and patient placement. Assist with return of patients to evacuated facilities. Coordinate with AHCA for post-impact assessments of facilities. Demobilize assets.				
Special Instructions				
Communications (radio and/or phone contact numbers needed for this assignment)				
Name	Function	Primary Contact (indicate cell, pager, or radio)		
Map / Image				
Prepared by				
Name: Jeff Bielling	Position/Title: ESF8 DPSC	Date/Time: 09/05/2019 13:52:26		

COVER SHEET: Complete			
Incident Name	Hurricane Dorian		
Operational Period	Date From: 09/06/2019	Date To: 09/10/2019	
	Time From: 07:00	Time To: 07:00	
Incident Action Plan			
			
IAP #6			
Signed _____			
State Coordinating Officer			
Signed _____			
Federal Coordinating Officer			
Prepared by			
Name: Ryan Lock	Position/Title: Planning Section Chief	Date/Time: 09/05/2019 15:30:00	

INCIDENT BRIEFING (ICS 201): Complete			
Incident Name	Hurricane Dorian		
Incident Number			
Operational Period	Date From: 09/06/2019	Date To: 09/10/2019	
	Time From: 07:00	Time To: 07:00	
Map/Sketch (include sketch, showing the total area of operations, the incident site/area, impacted and threatened areas, oversight results, trajectories, impacted shorelines, or other graphics depicting situational status and resource assignment)			
			
<p>Hurricane Dorian Sunday September 01, 2019 11 AM EDT Advisory 33 NWS National Hurricane Center</p> <p>Current information: x Center location 26.5 N 79.8 W Maximum sustained wind 180 mph Movement W at 7 mph</p> <p>Forecast positions: Tropical Cyclone: ● Sustained winds: D < 39 mph S 39-73 mph H 74-110 mph M > 110 mph</p> <p>Potential track area: Watches: Day 1-3 (blue), Day 4-5 (yellow) Warnings: Hurricane (red), Tropical Storm (orange), Tropical Storm (blue), Hurricane (red)</p> <p>Current wind extent: Hurricane (red), Tropical Storm (orange)</p>			
<p>Situation Summary and Health and Safety Briefing (for briefings or transfer of command): Recognize potential incident Health and Safety Hazards and develop necessary measures (remove hazard, provide personal protective equipment, warn people of the hazard) to protect responders from those hazards.</p> <ul style="list-style-type: none"> • All wind and storm surge watches/warnings have been cancelled for Florida as Dorian has moved away. • A Coastal Flood Warning is in effect for inland Duval, Clay, Putnam, inland St. Johns, inland Flagler through this evening as water levels in the St. Johns are still causing minor flooding at high tide (water levels 1-2' above normal). • A River Flood Warning is in effect for the St. Johns River at Astor, and moderate flooding is forecast for the next couple of days. • A high risk of rip current continues for many Florida beaches. Wave heights along the Atlantic will be 3-6'. • Little to no chance of rain is forecast for Florida for the next few days. Temperatures will reach the lower to middle 90s with a heat index of 103-110 degrees. A Heat Advisory is in effect today for the Tampa region. • Gabrielle and Invest 92L pose no threat to Florida. • The Leeward Island Low and the African Tropical Wave pose no threat to Florida for at least the next week, if any. • The next names on the 2019 Atlantic storm name list are Humberto and Imelda. 			

FDEM WebEOC – INCIDENT ACTION PLAN (IAP)



Incident Action Plan Published

2019 Dorian

[Return to List](#)
[PDF](#)

Incident Name	Operational Period	Date From Time From	Date To Time To	
Hurricane Dorian		09/06/2019 07:00	09/10/2019 07:00	Delete IAP Send to Template View IAP
Hurricane Dorian		09/05/2019 07:00	09/06/2019 07:00	Delete IAP Send to Template View IAP
Hurricane Dorian		09/04/2019 07:00	09/05/2019 07:00	Delete IAP Send to Template View IAP
Hurricane Dorian		09/03/2019 07:00	09/04/2019 07:00	Delete IAP Send to Template View IAP
Hurricane Dorian		09/02/2019 07:00	09/03/2019 07:00	Delete IAP Send to Template View IAP
Hurricane Dorian		09/01/2019 07:00	09/02/2019 07:00	Delete IAP Send to Template View IAP
Hurricane Dorian		08/31/2019 07:00	09/01/2019 07:00	Delete IAP Send to Template View IAP
Tropical Storm Dorian		08/30/2019 07:00	08/31/2019 07:00	Delete IAP Send to Template View IAP

Approved by

Name	Title	Date/Time Approved
Ryan Lock	Planning Section Chief	09/04/2019 17:44:32

Incident Action Plan




IAP #6

 Signed
 State Coordinating Officer

 Signed
 Federal Coordinating Officer

Prepared by

Name: Ryan Lock	Position/Title: Planning Section Chief
Signature: _____	Date/Time: 09/05/2019 15:30:00

Incident Briefing (ICS 201)

- Once individual template forms are completed the Plans Chief locks editing, submits for review and publishes.
- Each daily published IAP is submitted to the IAP Published Board where each template is consolidated and can be converted to a PDF.
- IAP is then printed and signed by the State Coordinating Officer.

FDEM WebEOC – LIFELINES BOARD



- Currently being developed (Complete by May 2020 – Statewide Hurricane Exercise)
- **Goal** – Refine reporting sources and products to enhance situational awareness, best determine capability gaps, and demonstrate progress towards stabilization
- **Objective** - individual Counties report lifeline specific resources, concerns, shortfalls, limiting factors, disruptions, outages, actions, and statuses.
- **Develop** - Create new Boards to organize and aggregate information independently or populate from direct pulls of information residing in existing Boards.
 - For Example – Emergency Sites, Shelters, Port Status, Resource Tracking, and EEI Boards
- Based on reported information, capability gaps would drive County lifeline status and drive incident action planning. Integrate with GIS to visually represent Statewide County statuses by Lifeline.

FDEM WebEOC – MISSIONS BOARD

WebEOC | Jason.Ray@em.myflorida.com | ADMN - SERT Administrator | 2019 Dorian | Log Out

SERT Port Status | SERT Essential Elements of Inform... | SERT Emergency Teams | SERT Shelters | SERT Emergency Sites | SERT Deployments | **SERT Missions** | (Archive) SERT Missions | SERT State Emergency

SERT Missions

2019 Dorian

Total Missions: 1395

Export to Excel | + New Mission | Actions

Region: View All | County: View All | Requesting Agency: View All | My Items: View All | Status: View All | Assigned To: View All | Tasked To: View All | Resource: View All

Entered On	Mission #	Parent Mission # (if Applicable)	Region/County	Requesting Agency	Requester	Title	Assigned To	Tasked To	Subtasked To	Support Missions Complete / Total	Status	Last Updated	Actions
08/30/2019 13:01:04	0525 (Primary)		State SERT	SERT	SERT LIAISON	RCT Manager requests computers for SERT LNO Teams	SERT TECH SERVICES	SERT TECH SERVICES - HELP DESK		0 / 0	Complete	10/07/2019 09:02:55	View/Update Edit Edit
09/23/2019 11:33:31	1393 (Primary)		Region 3 Marion County	Marion County	CNTY Marion	Request for Joint PDA	SERT RECOVERY	SERT RECOVERY - PAPDA		0 / 0	Complete	10/04/2019 15:54:31	View/Update Edit Edit
09/09/2019 09:35:36	1368 (Primary)		Region 4 Sumter County	Sumter County	CNTY Sumter	PA Joint Preliminary Damage Assessment Request	SERT RECOVERY	SERT RECOVERY - PAPDA		0 / 0	Complete	10/04/2019 15:54:30	View/Update Edit Edit
09/11/2019 10:02:00	1374 (Primary)		Region 5 Lake County	Lake County	CNTY Lake	Lake County request for Joint PDA	SERT RECOVERY	SERT RECOVERY - PAPDA		0 / 0	Complete	10/04/2019 15:54:29	View/Update Edit Edit
09/10/2019 15:45:57	1372 (Primary)		Region 4 Hardee County	Hardee County	CNTY Hardee	PA Joint preliminary Damage Assessment Request	SERT RECOVERY	SERT RECOVERY - PAPDA		0 / 0	Complete	10/04/2019 15:54:28	View/Update Edit Edit
09/19/2019 08:01:41	1389 (Primary)		Region 7 Miami-Dade County	Miami-Dade County	CNTY Miami-Dade	PA Joint Preliminary Damage Assessment (JPDA) Request	SERT RECOVERY	SERT RECOVERY - PAPDA		0 / 0	Complete	10/04/2019 15:54:27	View/Update Edit Edit
09/26/2019 17:44:52	1395 (Primary)		Region 7 Broward County	Broward County	CNTY Broward	Joint Preliminary Damage Assessment	SERT RECOVERY	SERT RECOVERY - PAPDA		0 / 0	Complete	10/04/2019 15:54:26	View/Update Edit Edit
09/04/2019 13:34:29	1311 (Primary)		Region 5 Brevard County	Brevard County	CNTY Brevard	Brevard- PA Joint Preliminary Damage Assessment Request	SERT RECOVERY	SERT RECOVERY - PAPDA		0 / 2	Complete	10/04/2019 15:54:25	View/Update Edit Edit

Page 1 of 56 | Disable Refresh?

©2019 ESi Acquisition, Inc. WebEOC

FDEM WebEOC – MISSIONS BOARD

WebEOC | Jason.Ray@em.myflorida.com | ADMN - SERT Administrator | 2019 Dorian | Log Out

SERT Port Status | SERT Essential Elements of Inform... | SERT Emergency Teams | SERT Shelters | SERT Emergency Sites | SERT Deployments | **SERT Missions** | (Archive) SERT Missions | SERT State Emergency

SERT Missions

2019 Dorian

Region: View All | County: View All | Requesting Agency: View All

Entered On	Mission #	Parent Mission # (if Applicable)	Region
08/30/2019 13:01:04	0525 (Primary)		State SERT
09/23/2019 11:33:31	1393 (Primary)		Region Maricopa
09/09/2019 09:35:36	1368 (Primary)		Region Sumter
09/11/2019 10:02:00	1374 (Primary)		Region Lake
09/10/2019 15:45:57	1372 (Primary)		Region Hard
09/19/2019 08:01:41	1389 (Primary)		Region Miami County
09/26/2019 17:44:52	1395 (Primary)		Region Brow
09/04/2019 13:34:29	1311 (Primary)		Region Brev

Update Mission #0525

Mission Status Information

Status * Complete (Ensure you select the correct Status)

Assigned To SERT TECH SERVICES

Tasked To SERT TECH SERVICES - HELP DESK

Subtasked To

Vendor

Comments *

- Not Applicable
- Safety and Security
- Food, Water, and Sheltering
- Health and Medical
- Energy (Power and Fuel)
- Communications**
- Transportation
- Hazardous Waste

Order Information

Title * for SERT L

Purpose * Transportation

Lifeline * Communications

Description * (describe what you're trying to accomplish) RCT Manager Jim Roberts is requesting 20 computers to be used by the SERT LNO teams that are being deployed to the county EOCs. The computers will be used to access OWA Webmail and WebEOC and will need to access the internet through a WiFi connection, a LAN connection or both.

Is this a Resource? Check this box if this mission is a resource.

Total Missions: 1395

Export to Excel | + New Mission | Actions

Status	Last Updated	View/Update
Complete	10/07/2019 09:02:55	View/Update Edit Edit
Complete	10/04/2019 15:54:31	View/Update Edit Edit
Complete	10/04/2019 15:54:30	View/Update Edit Edit
Complete	10/04/2019 15:54:29	View/Update Edit Edit
Complete	10/04/2019 15:54:28	View/Update Edit Edit
Complete	10/04/2019 15:54:27	View/Update Edit Edit
Complete	10/04/2019 15:54:26	View/Update Edit Edit
Complete	10/04/2019 15:54:25	View/Update Edit Edit

Page 1 of 56 | Disable Refresh?

©2019 ESi Acquisition, Inc. WebEOC

ARCGIS EXTENSION

ArcGIS Extension Plugin used to create hosted feature layers and made available directly in ArcGIS Online for use with Common Operation Platform, standalone web applications, and ArcGIS Pro for hard copy map products.

ArcGIS Extension

WebEOC API ArcGIS API **Feature Services** Recent History

+ Add Feature Service

1 - 11 of 11 Filter...

<input type="checkbox"/>	Feature Service ^	Sync	Size	User Name	Board Name	Display View Name	Incident		
<input type="checkbox"/>	SERTDeployments ⓘ	✓ Enabled	720KB	sert_webeoc	SERT Missions (2019)	Deployment Details	N/A	Open in ArcGIS	<input type="button" value="Delete"/>
<input type="checkbox"/>	SERTEmergencySites ⓘ	✓ Enabled	7.1MB	sert_webeoc	SERT - Emergency Sites	Details	N/A	Open in ArcGIS	<input type="button" value="Delete"/>
<input type="checkbox"/>	SERTEmergencyTeams ⓘ	✓ Enabled	360KB	sert_webeoc	SERT - All Hazards Incident Management Team	List - State Incident Management Teams	N/A	Open in ArcGIS	<input type="button" value="Delete"/>
<input type="checkbox"/>	SERTMilitarySupport ⓘ	✓ Enabled	0B	sert_webeoc	SERT Missions (2019)	Military Support Details	N/A	Open in ArcGIS	<input type="button" value="Delete"/>
<input type="checkbox"/>	SERTMissionsPrimary ⓘ	✓ Enabled	15.3MB	sert_webeoc	SERT Missions (2019)	Mission Details	N/A	Open in ArcGIS	<input type="button" value="Delete"/>
<input type="checkbox"/>	SERTPortStatus ⓘ	✓ Enabled	304KB	sert_webeoc	SERT - Port Status	List View State	N/A	Open in ArcGIS	<input type="button" value="Delete"/>
<input type="checkbox"/>	SERTRecon ⓘ	✓ Enabled	520KB	sert_webeoc	SERT - Recon	List	N/A	Open in ArcGIS	<input type="button" value="Delete"/>
<input type="checkbox"/>	SERTShelters2019 ⓘ	✓ Enabled	2MB	sert_webeoc	SERT - Shelters	Details SEOC	N/A	Open in ArcGIS	<input type="button" value="Delete"/>
<input type="checkbox"/>	SERTStateEmergencySites ⓘ	✓ Enabled	3.9MB	sert_webeoc	SERT - State Emergency Sites	Details	N/A	Open in ArcGIS	<input type="button" value="Delete"/>
<input type="checkbox"/>	SERTStateInventory ⓘ	✓ Enabled	464KB	sert_webeoc	SERT State Inventory	Details - Mobile	N/A	Open in ArcGIS	<input type="button" value="Delete"/>

1 - 11 of 11

MAP & APP GALLERY

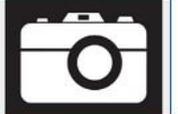
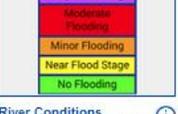
SERT GATOR
Sort by ▼ Layout ☰ Sign Out ↗

SERT GATOR

Geospatial Assessment Tools for Operations & Response for Florida State Emergency Response Team

Tags

511 advisories air Airports airports arc assessments beach business cameras cap cf clōsures cop crashes critical crowd currents damage dashboard deploymnets depot dorian dpbr drp dwm eei elements emergency esf17 essential facilities fdacs FDEM fdem fdep fema fhp fl serf fl511 flirt flooding Florida florida flisert food forecast fuel Fuel GasBuddy gator gauge high hurricane Hurricane Irma hwm ia imagery incident inundation journal logistics map marks michael mission missions mitigation napsq noaa observed open shelters operations ops outages pa photos planning Ports power precipitation private qpf rain rainfall recon recovery red cross reports rip river safety SERT shelters site situation state office Status status storm storm reports strike surge team traffic tropical tropics warehouse warnings watches water weather webcam WebEOC wrm

 <p>Common Operation Platform Web Mapping Application</p>	 <p>Common Operation Platform - Dashboard Web Mapping Application</p>	 <p>Airport Status Web Mapping Application</p>	 <p>Airports (Air Ops) Web Mapping Application</p>	 <p>Beach Webcam Dashboard Web Mapping Application</p>	 <p>CAP Photos Web Mapping Application</p>	 <p>Critical Facilities - SERT Web Mapping Application</p>
 <p>Crowdsourced Photos Web Mapping Application</p>	 <p>Damage Assessments - Dorian Web Mapping Application</p>	 <p>Dorian Imagery Web Mapping Application</p>	 <p>Emergency Fuel Depots Web Mapping Application</p>	 <p>Essential Elements of Information Web Mapping Application</p>	 <p>FDEP Applications Application</p>	 <p>FEMA Region IV Map Journal Web Mapping Application</p>
 <p>FL511 Web Mapping Application</p>	 <p>FLIRRT - Food Safety Facilities Web Mapping Application</p>	 <p>GasBuddy Fuel Status Web Mapping Application</p>	 <p>GATOR Web Mapping Application</p>	 <p>High Water Marks Web Mapping Application</p>	 <p>Logistics Web Mapping Application</p>	 <p>Mission Deployments Web Mapping Application</p>
 <p>Observed Precipitation Web Mapping Application</p>	 <p>Open Shelters Web Mapping Application</p>	 <p>Open/Closed Private Businesses Web Mapping Application</p>	 <p>Ports Status Web Mapping Application</p>	 <p>Potential Surge Inundation Flooding Web Mapping Application</p>	 <p>Power Outages - Dashboard Web Mapping Application</p>	 <p>Recon Reports Web Mapping Application</p>
 <p>Rip Currents Web Mapping Application</p>	 <p>River Conditions Forecast - Dashboard Web Mapping Application</p>	 <p>Situation Map Web Mapping Application</p>	 <p>State Facility Closures Web Mapping Application</p>	 <p>Traffic Web Mapping Application</p>	 <p>Tropical Weather Web Mapping Application</p>	 <p>WebEOC Missions Web Mapping Application</p>

COMMON OPERATION PLATFORM

Common Operation Platform

Activated Counties

29

Last update: 2 minutes ago

Total Missions*

834

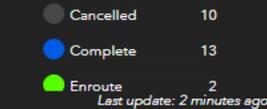
*Mapped in WebEOC

Last update: 2 minutes ago

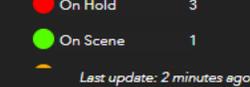
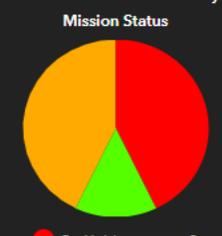
Health & Medical Lifeline by Mission Status



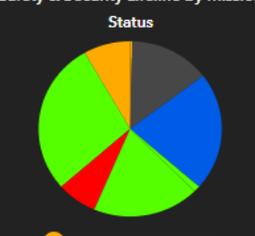
Energy (Power & Fuel) Lifeline by Mission Status



Hazardous Waste Lifeline by Mission Status



Safety & Security Lifeline by Mission Status



Base Camps

0

Last update: 2 minutes ago

Total Accounts without Power (Statewide)

12,653

Last update: 2 minutes ago

State Logistics Staging Areas

3

Last update: 2 minutes ago

Open Shelters*

107

*Publically Visible

Last update: a few seconds ago

County Logistics Staging Areas

2

Last update: 2 minutes ago

Incident Management Teams - On Scene

3

Last update: 2 minutes ago

County Points of Distribution

0

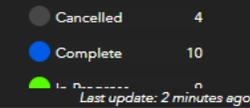
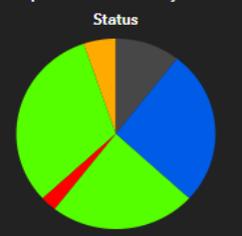
Last update: 17 hours ago

Business Recovery Centers

0

Last update: 2 minutes ago

Transportation Lifeline by Mission Status



Warehouses

10

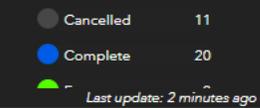
Last update: 2 minutes ago

Disaster Recovery Centers

0

Last update: 2 minutes ago

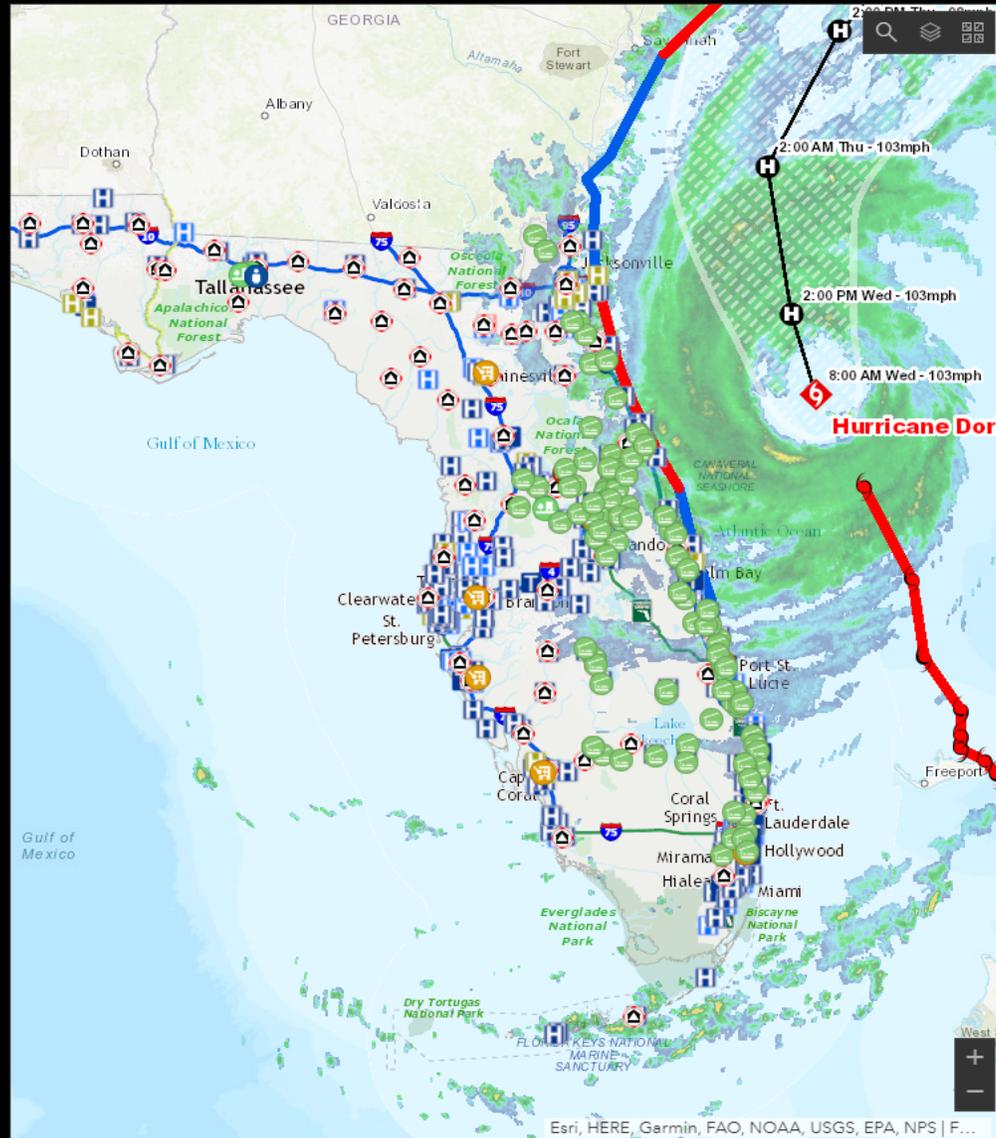
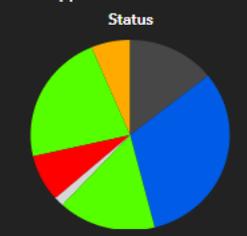
Communications Lifeline by Mission Status



Food, Water, & Sheltering Lifeline by Mission Status



Not Applicable Lifeline Mission Status



Incident Management Teams

- State Base Camps
- Open Shelters
- Disaster Recovery Centers
- Business Recovery Centers
- State Logistics Staging Area
- County Logistics Staging Areas
- County Points of Distribution
- Warehouses
 - Warehouse (State)
 - Warehouse (NGO/NPO)
- Emergency Operation Centers
 - EMERGENCY OPERATIONS CENTER
- Hospitals
 - HOSPITAL

QUESTIONS?



PROGRAMS & PARTNERS

PLAN & PREPARE

BUSINESS & INDUSTRY

NEWS & MEDIA



The Latest Information on Hurricane Michael

LEARN MORE

Jason Ray

Jason.Ray@em.myflorida.com

GIS Administrator/Acting Chief Information Officer

FDEM – Interim Information Technology and Management Bureau Chief

SERT – Technical Services Branch Director/State GIS Manager

850-815-4730

LEARN MORE

Web-Enabled Crisis (Incident) Action Plans

Real-World Problem – How do you develop decision support tools to answer the questions being asked at different phases of an incident?

- By Community Lifeline / Hazard / Timeline / for what Audience – What are the questions being asked at different phases of an emergency?
- What are the information gaps? Engaging Mission Partners
- How can the Applications (Mobile, SA Viewer, Dashboards, Story Map Journals, etc.) be configured, tested and revised in advance by stakeholders?

Facilitated Discussion

Sample questions

Lifeline	Core Info Need	Public	First Responders	Emergency Managers	Operational Game Plan	Technical Game Plan
	Shelter Status	Where can I go to be safe?	Where do I take / direct evacuees?	Where are the evacuees? Do we have enough room?	Mass Care Lead and Red Cross will update the status of shelters.	The Master Feature Layer can be edited from web apps or Collector for ArcGIS (offline). The Hosted Feature Layer View, filtered for status = open, is embedded in the Public Information Map.
	Road Status					
	Landfill Status					



Arizona ESF/RSF Operations Dashboard

Arizona Department of Emergency and Military Affairs
(AZ DEMA)

Ready, Responsive, Reliable



Agency Mission

Department of Emergency and Military Affairs

The Department's mission is to provide military and emergency management capabilities to citizens of Arizona and the Nation

Ready, Responsive, Reliable



Whole Community

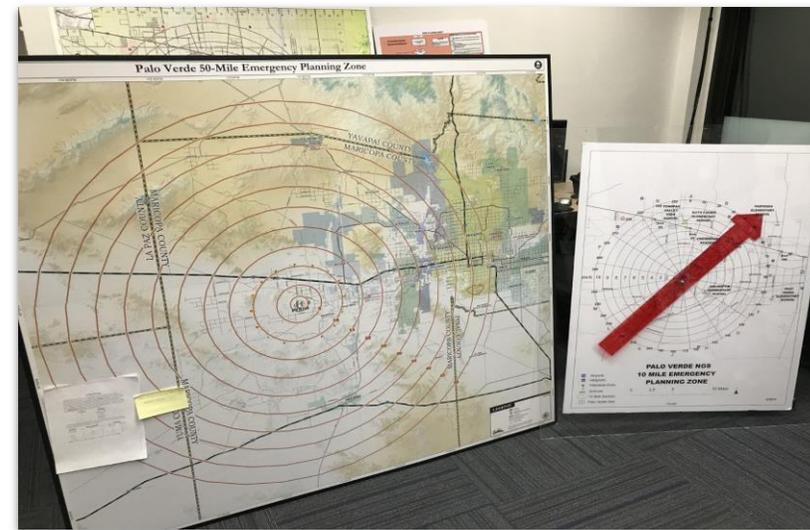
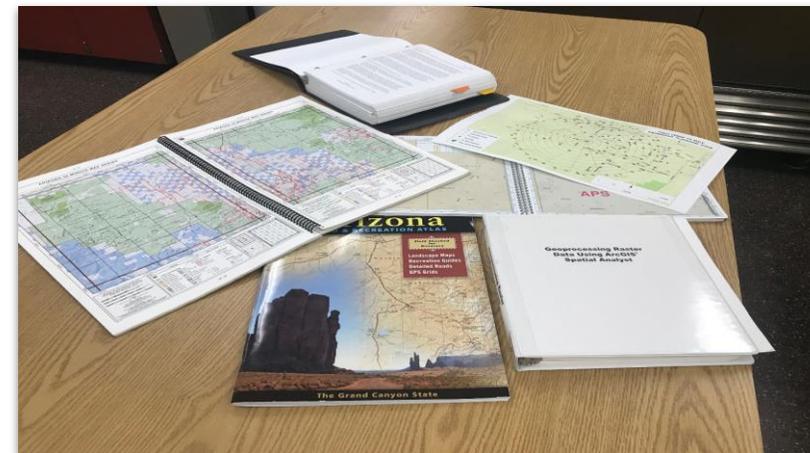


Ready, Responsive, Reliable



DEMA GIS Prior to 2017

- Location Intelligence back in the day.
- Post it notes were used for updates to the board.
- Had data living on a server that never was utilized for operational purposes.
- The turnaround time to produce a map took several days.
- Inefficient workflows.
- By the time a map was printed the situation had changed.



Ready, Responsive, Reliable



Arizona ESF/RSF Operations Dashboard

- Finding a solution that could alleviate the amount of static information PDFs & Screenshots sent through email.
- Finding a way that could funnel /segment raw data into an Emergency Support Function (ESF).
- As well as something that could fall along the roles and responsibilities of the State Emergency Response & Recovery Plan (SERRP).



Ready, Responsive, Reliable



Arizona ESF/RSF Operations Dashboard



- Location intelligence & analytics for a real-time operational view for emergency management activities in Arizona.
- The connector is a powerful tool because it allows the end-user/non-GIS users (Emergency Managers & Operational Personnel) to locate information and place it on a map to build a common operating picture in an Emergency Operations Center setting.
- The tool takes the burden off relying on the Situation Unit/GIS Group to populate data.



Ready, Responsive, Reliable



Arizona ESF/RSF Operations Dashboard



Ready, Responsive, Reliable



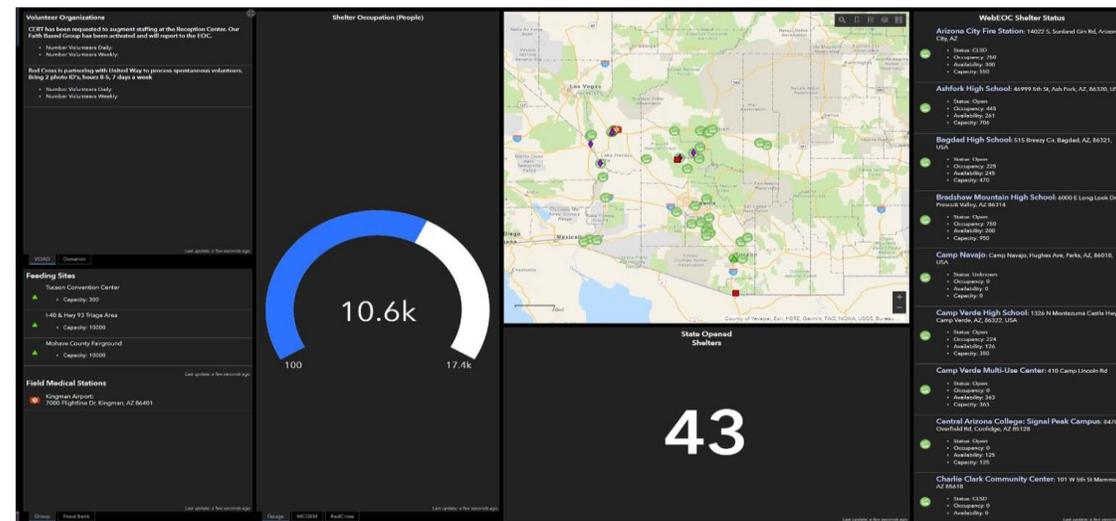
February 2019 Winter Snow Storm



Shelter Status

Name	County	Status	Type	ADA Compliant	Functional Needs	Pet Friendly	Back-up Generator	Capacity	Occupancy	Availability	Details
Church of Christ	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
Alpha and Omega Churches of Christ	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	100	0	0	Print View of this Shelter
Restoration Ministry	Pima	Open	Independently Managed	Yes	Yes	Yes	Yes	200	54	146	Print View of this Shelter
Douglas Preparatory High School - LSB (not at OMC)	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
Carroll Family Center	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
Casey Hill - OCB	Pima	Open	Independently Managed	Yes	Yes	Yes	Yes	16	0	16	Print View of this Shelter
Case De Charon #1 - LSB	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
Case De Charon #2 - LSB	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
Central Christian Church - Mesa	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
Central Christian Co-Sponsorship Vero Haven - LSB	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
City Square Church - LSB	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
First Lutheran Church	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
First United Methodist Church	Pima	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
First United Methodist Church	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
Friends of Aquia Park Church	Pima	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
Genesis Lutheran and Ministry Center	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
Helping With My Heart	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
Independently - TSA	Pima	Open	Independently Managed	Yes	Yes	Yes	Yes	104	28	76	Print View of this Shelter
Ignace Cabrera St. Berni Pastor - LSB	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
Imperial De Anza Center - LSB	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
Miss Church - OCB	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	0	0	0	Print View of this Shelter
Lutheran Social Services (LSS) of the Southwest	Maricopa	Open	Independently Managed	Yes	Yes	Yes	Yes	100	0	100	Print View of this Shelter

- For this event having the data visualized as a metric or number allowed the audience to easily consume information.
 - Was helpful for new resources/personnel entering the EOC to get caught up to speed.
 - Briefing Executive/Policy Makers was more effective.
- Having a Status Dashboard allowed us to add additional datasets into one application.
 - Shelters
 - Warming Centers
 - County Infrastructure Status

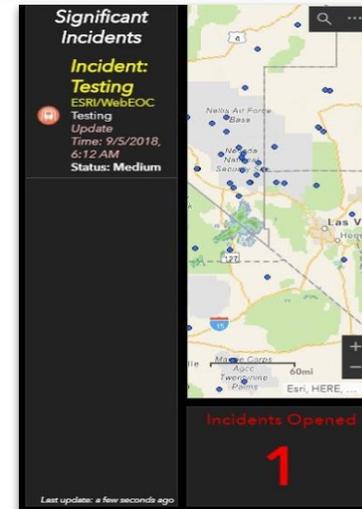


Ready, Responsive, Reliable



Current Status/Road Map

- Completed our WebEOC rebuild (with Juvare).
- A majority of the boards have a geographical component to it.
 - (ICS - 214) Event Reporting
 - Countywide Infrastructure Status Board
 - Shelters
- Integrating more spatial data back into WebEOC.
 - Damage assessment via Collector & Survey123
 - Search and rescue missions

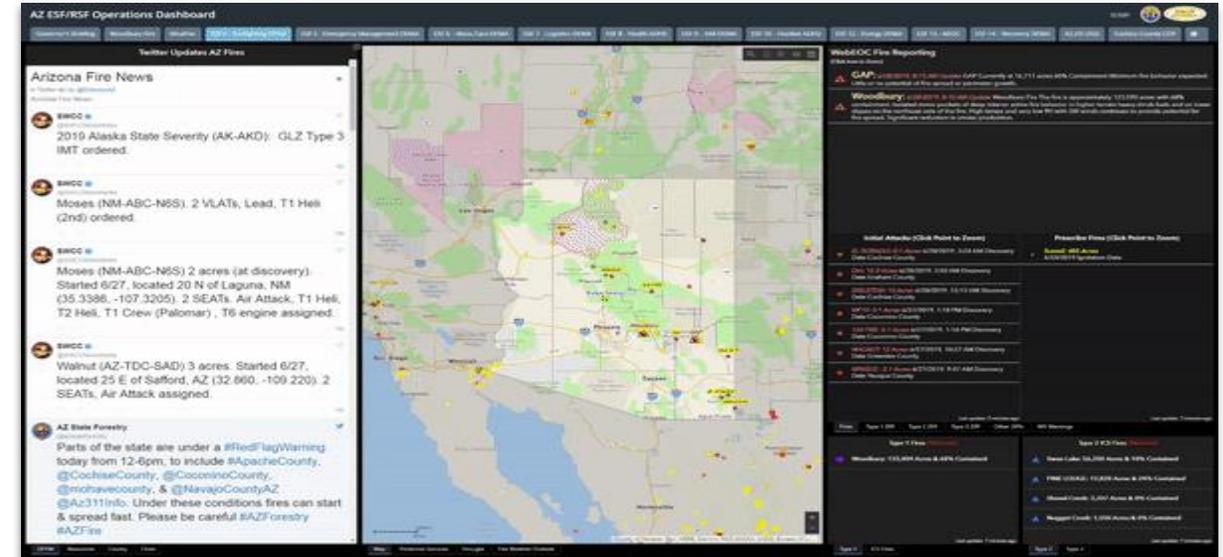


Ready, Responsive, Reliable



In Summary/Now What?

- Step 1 – **Connect the people** – relationships are key and reaching out to the appropriate agencies and jurisdictions is the place to start
- Step 2 – **Connect the data** – make the data flow (like plumbing) and make sure the operationalize the key data that is needed for decision making.
- Step 3 – **Build the info products-** Configure information products / dashboards to support the larger story map.
- Step 4 – **Watch the information flow in the Story Map / Dashboard!!** And leverage the value that the increase information flow provides for more effective and efficient response, coordination, and situational awareness.



Things to consider

- Break out of silos to solve problems and create solutions.
- Leverage shared data.
- Eliminate manual processes.
- Create solutions for the “Whole Community”.

Ready, Responsive, Reliable



Questions?

**Eric Shreve,
Senior GIS Analyst**

DEMA CTA

Office: (602) 464-6344

eric.shreve@azdema.gov

**Thomas Szewczyk,
Application Developer**

DEMA CTA

Office: (602) 464-6334

thomas.szewczyk@azdema.gov

**Dave Roby,
WebEOC Admin**

DEMA CTA

Office: (602) 464-6307

david.robby@azdema.gov

Ready, Responsive, Reliable

Where do you start?

Going from Concept to Implementation

Communicating with data partners:

- Lead with your smallest, highest impact ask
- Be Transparent
- Be aware of what your ask triggers from their perspective
- Once you're in, be ready to speak to:
 - Data Quality, Consistency, Fidelity to Purpose, Outcomes
- Close the deal
 - What do you need? Schedule Check-ins.
- Show what you did!

Communicating with leadership:

- Demo, don't explain, if possible
- Keep it Super Simple
- Handling leadership "idea fairy" suggestions
- Use anecdotes and singular facts to explain concepts and challenges
- Show what you did!

Thank you!