

Geospatial Tools for Search & Rescue and First Responders



January 30, 2020

Future EM Geo Forum Dates

March EM Geo Forum

Details Coming Soon!

<https://www.napsgfoundation.org/events/>



**Geospatial Tools for Search & Rescue and First Responders**

Join the FEMA Response Geospatial Office (RGO) and the National Alliance for Public Safety GIS (NAPSG) Foundation for this virtual seminar to learn about geospatial resources and best practices to aid in search and rescue (SAR) operations.

Attendees will learn about:

- The purpose of SAR data collection and the ways it can be used
- Field data collection methods and ways to integrate them into an organization
- Developing an organizational game plan to transform data and technology into actionable information that changes the outcome for survivors
- FEMA's timeline and geospatial strategy for SAR

Date: January 30, 2020 from 2:00 PM to 3:00 PM EST
Registration: <http://events.r20.constantcontact.com/register/event?oidk=a07egswxm85cb4cfca8&llr=nplxpbdab>
Audience: Search and Rescue Professionals, First Responders, Technical/GIS Support Staff, other staff who support SAR operations



Modeling and Data Working Group (MDWG)

Meeting the 3rd Wednesday of the month
from 2:00-3:30 PM ET

Adobe Connect: <https://fema.connectsolutions.com/mdwg-monthly-meeting/>
Conference Bridge: 800-320-4330, Passcode: 399137#

Email: fema-mdwg@fema.dhs.gov



FEMA

Welcome

Chris Vaughan, GIO, FEMA

Today's Presenters



Paul Doherty, PhD
Program Manager
NAPSG Foundation



Jared Doke
Program Specialist
NAPSG Foundation



Lance Gilmore
Emergency Management
Specialist
FEMA



Adam Barker, PhD
Response Geospatial Office
FEMA

About NAPSG Foundation

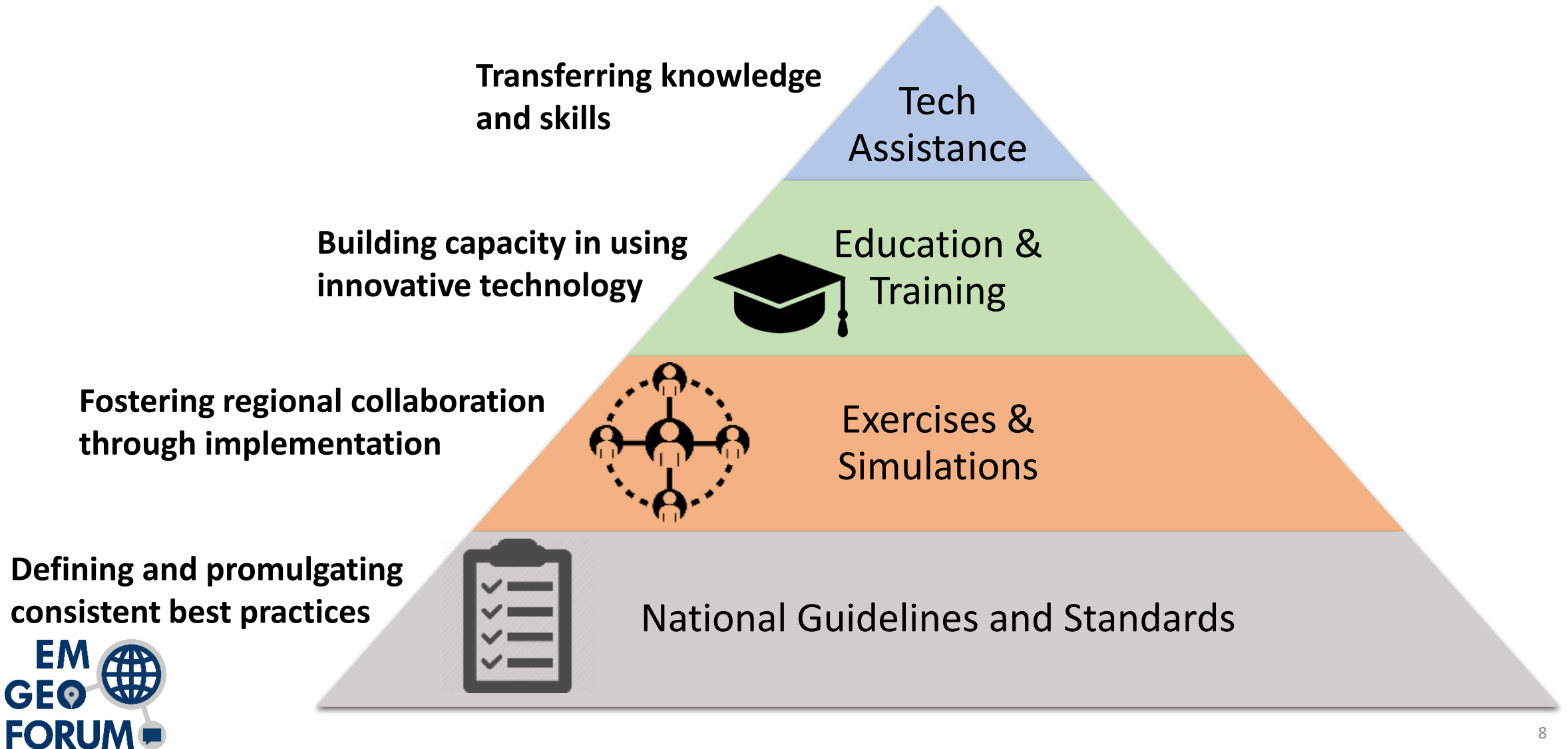
Our Vision

A Nation of emergency responders and leaders equipped with the knowledge and skills in applying technology and data to change the outcome for survivors.

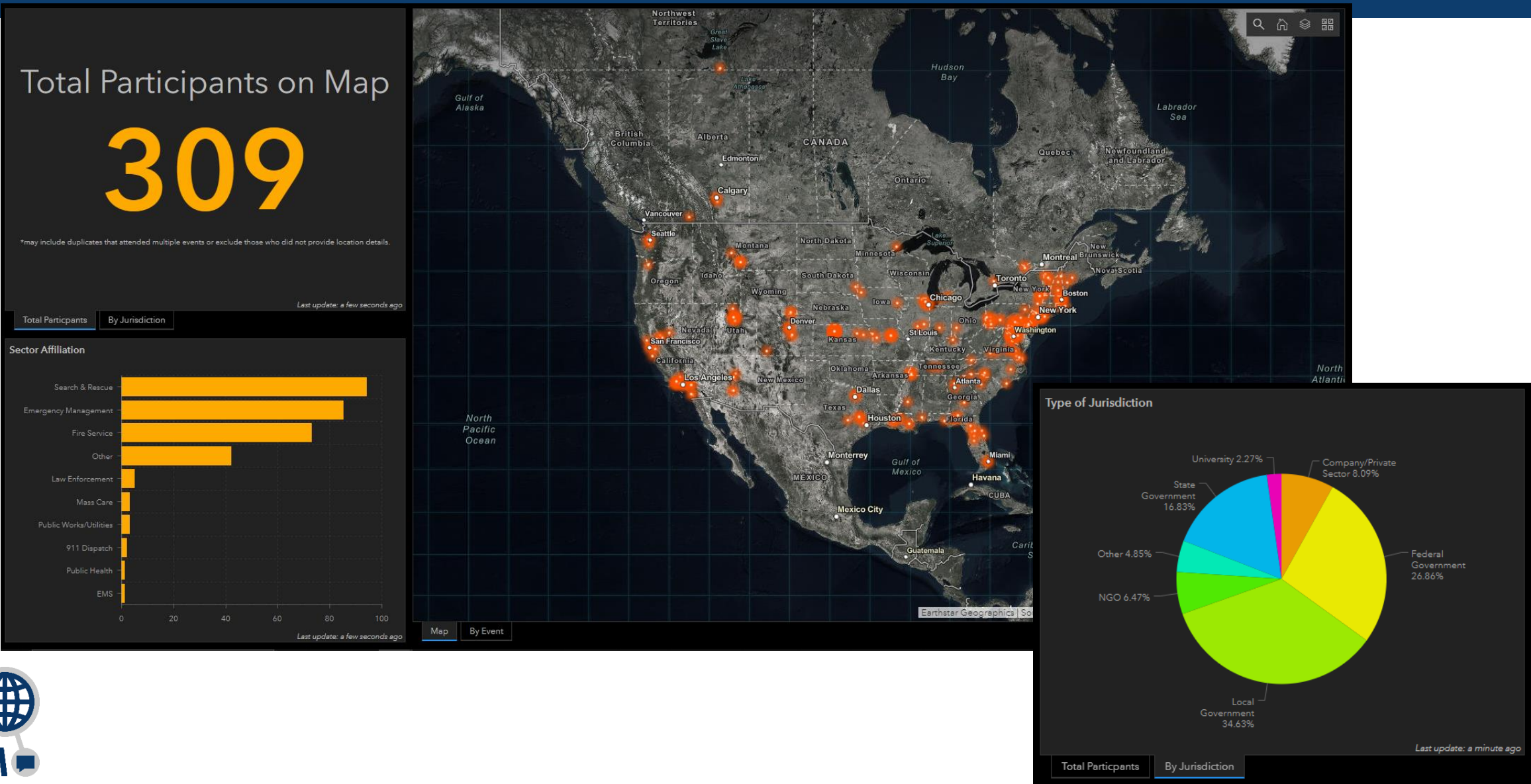
- 501(c)(3) Non-profit organization established in 2005
- +20,000 member network: Public Safety leaders, first responders, and GIS practitioners
- Board of Directors comprised of public safety & emergency management industry leaders



How Do We Do It



Today's Attendees



Objectives

1. Learn about the purpose of SAR data collection and ways in which this data can be used.
2. Learn about field data collection methods and ways to integrate them into your organization.
3. Learn how to develop an organizational game plan to transform data and technology into actionable information that changes the outcome for survivors.
4. Gain insight into FEMA's timeline and geospatial strategy for SAR.

Purpose of Field Data Collection

Situational Awareness (More than dots on a map...)

- Real-time situational awareness & collaboration

“I can see where other search & rescue teams have already searched and what is needed in the field.”

- Enhanced data collection and reporting capabilities

“I can see what has already been accomplished and make predictions on how much time and resources it will take to complete the operation.”

- Improved search strategy & tactics





“I can see what areas have been covered and what remains to be searched.”

- Operational Intelligence

“I can identify the highest priority tasks and assign them to the appropriate teams”.

Game Plan – Common Language

Four themes of data collected by SAR and First Responder Survey

Human Interactions	Structure Damage (Rapid)	Hazards	Support
			

Hurricane Florence

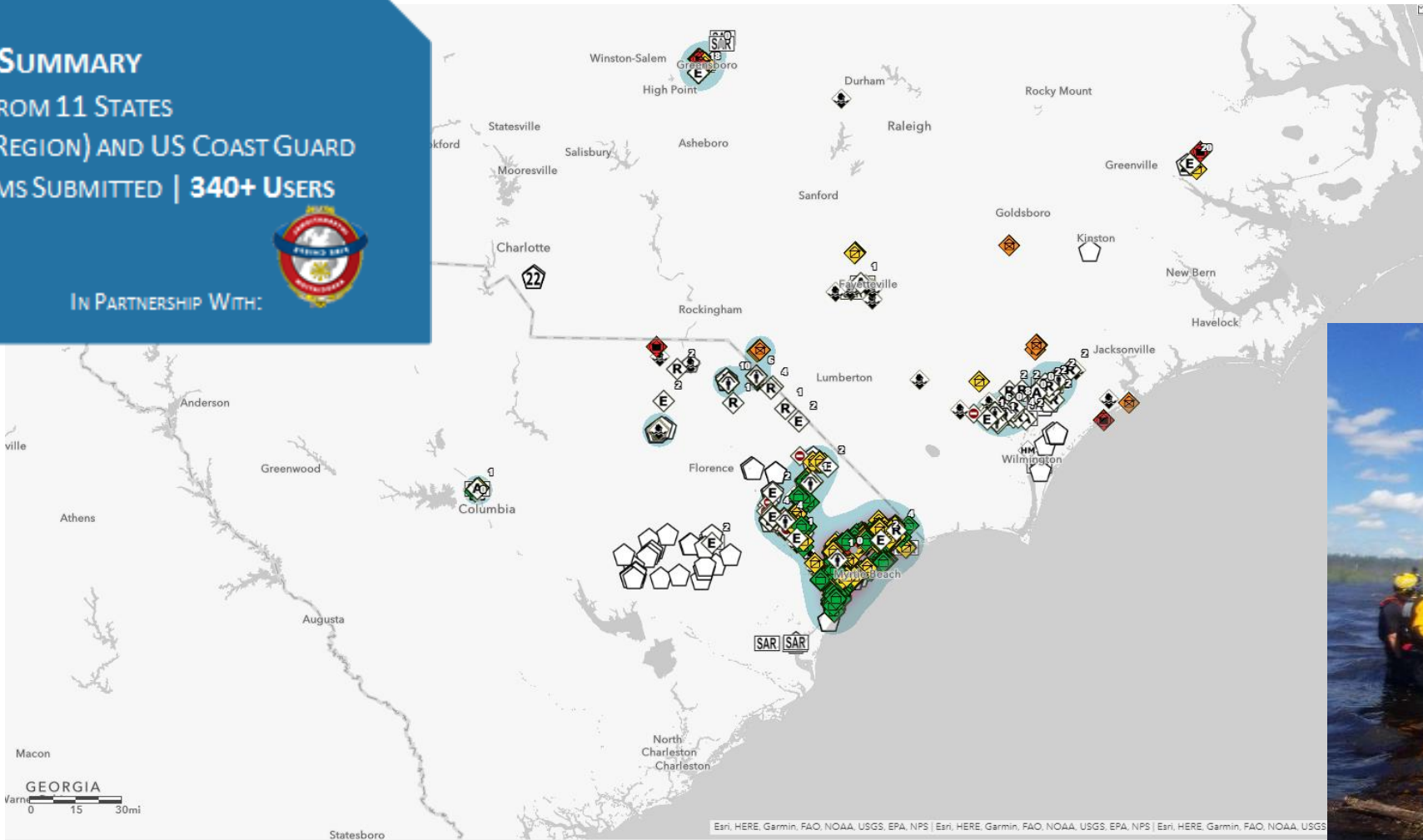
SAR SUPPORT SUMMARY

60 SAR TEAMS FROM 11 STATES

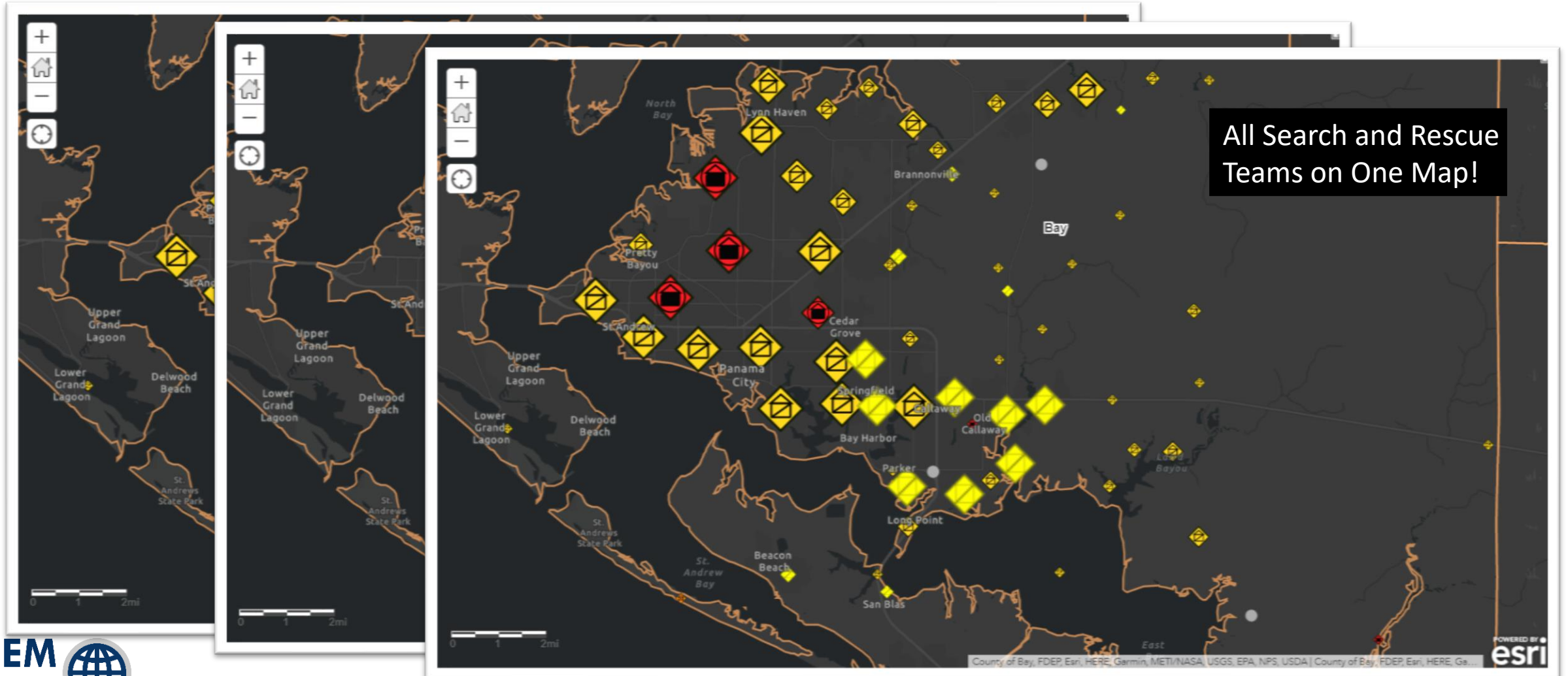
FEMA (IST AND REGION) AND US COAST GUARD

2,600 FIELD FORMS SUBMITTED | 340+ USERS

IN PARTNERSHIP WITH:



One Team, One Fight



Interoperability

- Collaborate with SAR Teams across agencies
- Integrate with existing platforms
 - US National Grid
 - Existing data collection tools (GPS)
 - Common operating platforms at National, State, Local EOCs.. volunteers
 - Messaging and C2 platforms
- Integrate with emergency management
 - Damage Assessment
 - Community Lifelines

Inspections/Assessments after a Disaster

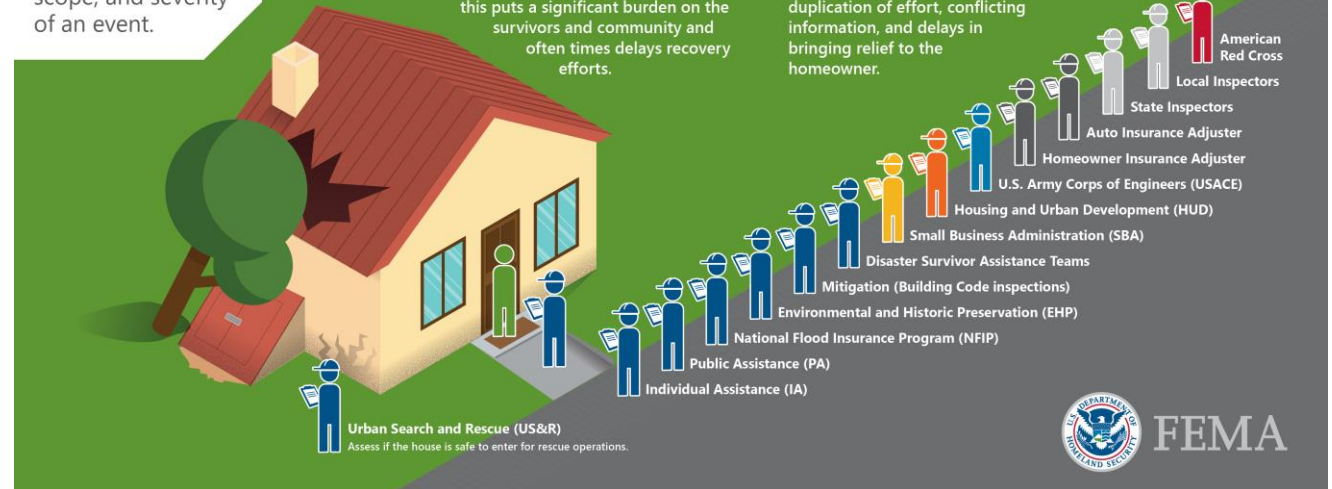
Assessments are an essential part of the response and recovery process and are critical for assessing the size, scope, and severity of an event.

THE CHALLENGE

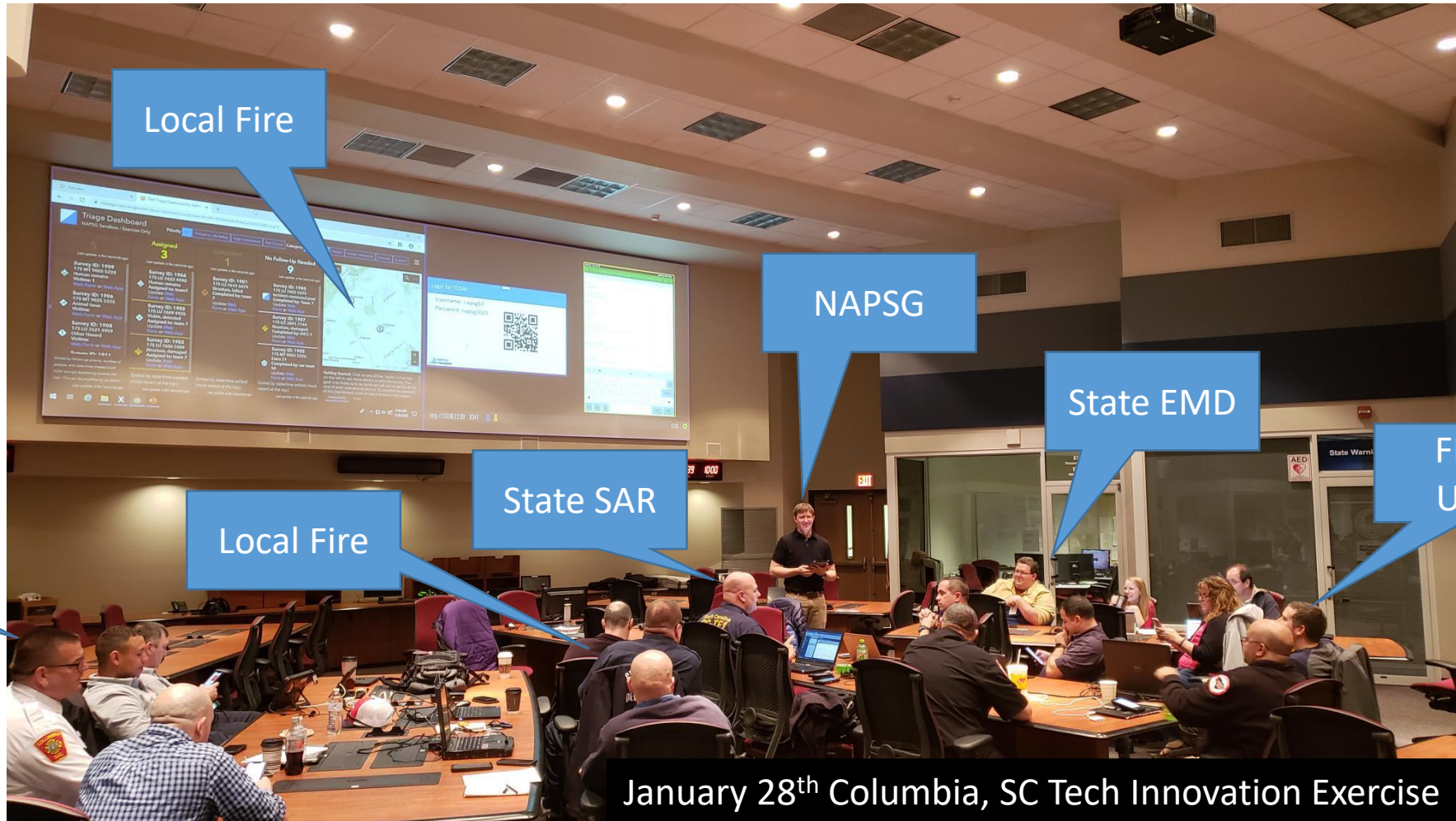
When a home is damaged as a result of a natural or man-made disaster, numerous damage assessments are performed to assess the safety of the structure, quantify the damage, and determine financial aid from the government and/or insurance company. While each assessment is conducted for a specific purpose, this puts a significant burden on the survivors and community and often times delays recovery efforts.

THE SOLUTION

Consistent standards and data sharing mechanisms are needed so various programs and agencies (e.g., state and local authorities, federal agencies, statutory authorities, non-profit organizations) can leverage the same data collected during the preliminary damage assessment. This will help avoid duplication of effort, conflicting information, and delays in bringing relief to the homeowner.



Interoperability



January 28th Columbia, SC Tech Innovation Exercise

Interoperability



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

FEMA has developed a construct for objectives-based response that prioritizes the rapid stabilization of Community Lifelines after a disaster.

Modern Field Data Collection Methods

























Garmin GPS and the Iron Sights Methodology



Search Definitions

- RECON - Preliminary survey of the area (How Big and How Bad)
- RAPID SEARCH (Hasty Search) - Fast paced and methodical search of the area.
- PRIMARY SEARCH - Quick search of the structures likely to contain victims.
- SECONDARY SEARCH - Systematic search of every room of every structure in the assigned area of operation.
 - LOW COVERAGE Secondary Search:
 - Systematic search of every room and void space.
 - HIGH COVERAGE Secondary Search:
 - Exhaustive search of every room and void space.
- TARGETED SEARCHES - Searches of specific locations.
 - Shelter locations
 - High Occupancy locations
 - Critical Infrastructure Facilities
 - Areas of last refuge
 - Locations of Special Needs Individuals or At-Risk Persons

Iron Sights Icons

					
1 - Structure No Damage	2 - Structure Damaged	3 - Structure Failed	4 - Structure Destroyed	5 - Assisted	6 - Evacuated
					
7 - Rescued	8 - Follow-Up Form	9 - Victim Detected	10 - Confirmed Victim	11 - Human Remains	12 - Human Remains Removed
					
13 - Shelter in Place	14 - Animal Issue	15 - Fire Incident	16 - Hazardous Material Incident	17 - Targeted Search	18 - Flood/Water Level
					
19 - Helicopter Landing Site	20 - Route Blocked	21 - Extra 23	22 - Extra 24	23 - Extra 23	24 - Extra 24

Transition from GPS to Survey123

A screenshot of the Survey123 app interface on a smartphone. The status bar at the top shows 'Safari', signal strength, Wi-Fi, time '10:02', and battery '99%'. The app header is green with a close button (X), the title 'v6 SAR and First Responder Field Data Collection Form', and icons for location and menu. The main content area has a light gray background with sections: 'Survey instructions, tips, and sharable QR code. Click arrow to left to open.' with a right-pointing arrow; 'Event Details: ★ Open to complete event details and "Set as favorite answers" (using instructions above) to pre-populate future forms. Be sure to reset favorite answers at the beginning of each search operation.' with a right-pointing arrow; 'Location *' with instructions to select a map for accuracy; a green bar showing '11S MT 8119 6723 ± 5 m' with a location pin icon; a satellite map with a red pin and 'Esri contributors' text; a 'USNG' text input field containing '11S MT 8119 6723'; and a green bar at the bottom with a white checkmark icon.

Survey123

- App that can be used on Android, iOS, Windows, and Desktop Computers and is part of the Esri ArcGIS platform.
- Works on smartphones, tablets, laptops, or desktops.
- Survey123 for ArcGIS is a complete, form-centric solution for creating, sharing and analyzing surveys.
- Use it to create smart forms with skip logic, defaults, and support for multiple languages.
- Collect data via web or mobile devices, even when disconnected from the Internet.
- Analyze results quickly

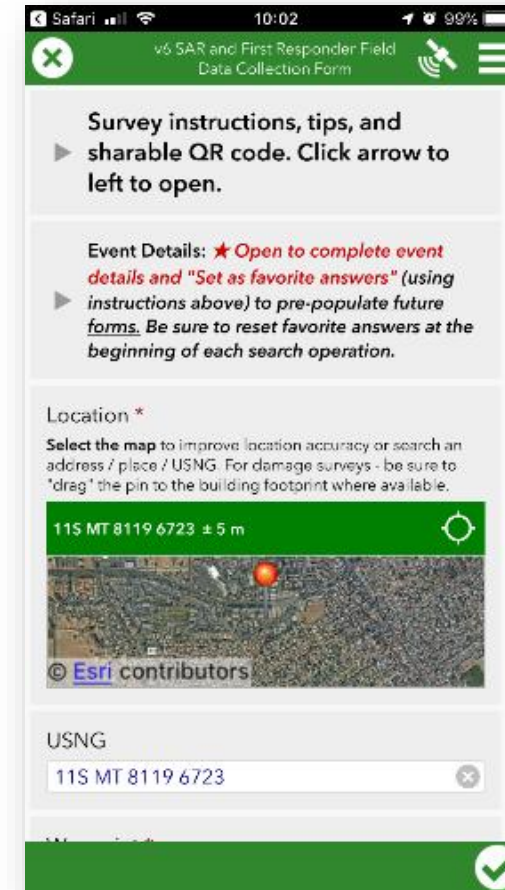


Part of the ArcGIS Platform



Benefits of Survey123 over GPS for USAR

- Smart form logic based on waypoint selected
- Automatic field calculations
- Ability to easily project waypoints to desired location
- Near real time data collection in a connected environment
- Fully integrated with ArcGIS Platform
- Ability to collect more meaningful data
- Enhanced data sharing



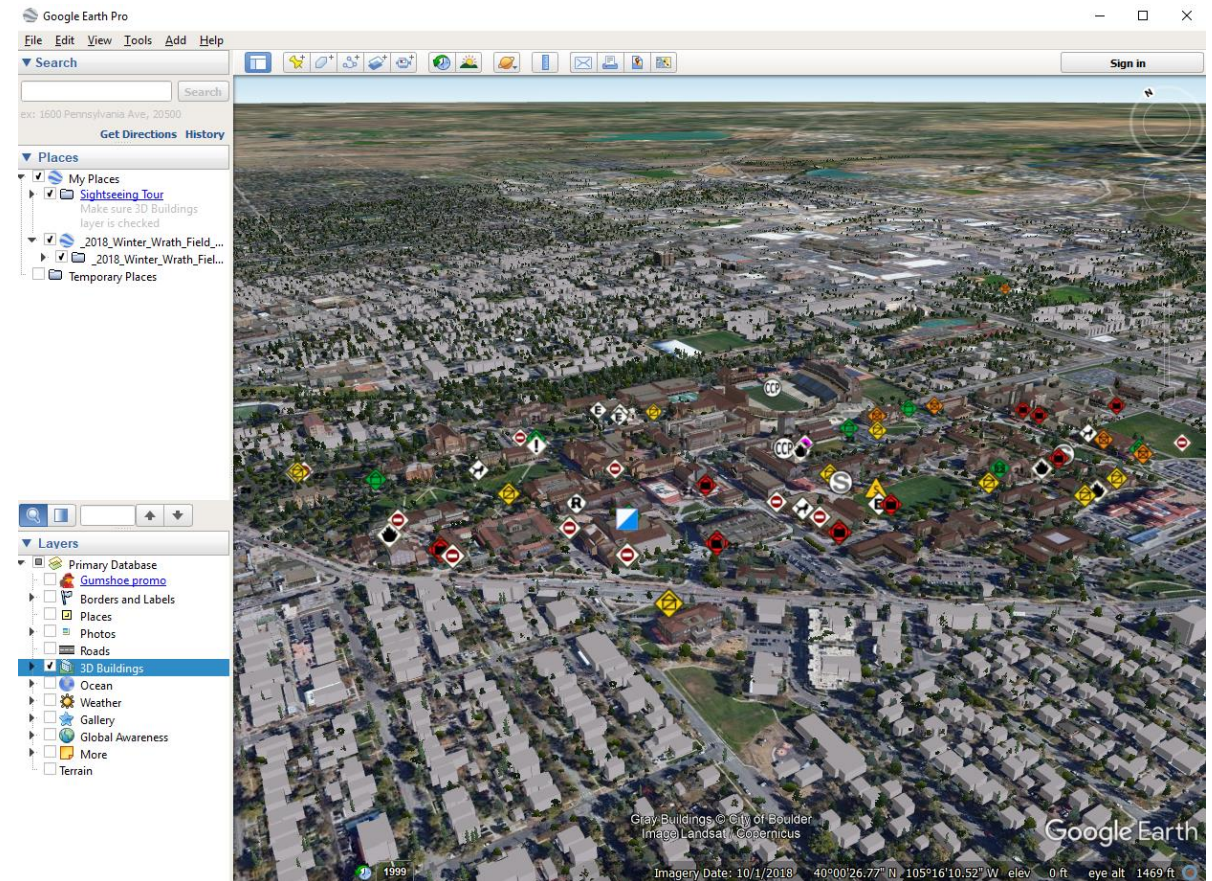
Additional Waypoints

Symbol	Name	Description (based on MO-TF1 Guide)
Human Interaction		
	Assisted	Materials assistance provided to residents
	Evacuated	Survivors transported to collection point
	Rescued	Technical rescue that required physical intervention
	Victim Detected	Potential victim detected (including canine alert or intelligence)
	Confirmed Victim	Confirmed live survivor (visual, audible, physical confirmation)
	Human Remains	Confirmed victim determined to be deceased
	Human Remains Removed	Human remains removed from specific location
	Shelter in Place	Survivors have chosen to remain at location
	Follow-Up Form	Additional information required not adequately described by symbol set
Hazard		
	Fire Incident	General fire occurrence
	Hazardous Material Incident	Nuclear, biological, or chemical incident
	Flood/Water Level	Predetermined site for documentation of water line
	Route Blocked	Inaccessible route by land or water
	Other Hazard	Other hazard not already identified

Structures		
	Structure No Damage	Low Risk, low probability of further collapse
	Structure Damaged	Medium Risk, structure is moderately damaged
	Structure Failed	High Risk, may be subject to sudden collapse
	Structure Destroyed	Complete destruction of structure
Other/Support		
	Targeted Search	Specific location or condition requiring increased search effort
	Helicopter Landing Site	Appropriate site for landing zone
	Animal Issue	Issue including aggression, location, assistance needed, etc.
	Incident Command Post	Incident Command Post
	Casualty Collection Point	Location that is used for the assembly, triage (sorting), medical stabilization and subsequent evacuation of casualties
	SAR Location Update	Can be used to update the location of a SAR team.
	Staging	Area where apparatus and personnel report to await assignment
	Safety Zone	A location that is confirmed to be safe from hazard or threat (e.g., above maximum flood height, clear from wildfire hazard, far from falling debris in an earthquake).
	Extra 21	Mission specific placeholder to be determined (e.g. abandoned vehicle, commercial structure, evidence)
	Extra 22	Mission specific placeholder to be determined
	Extra 23	Mission specific placeholder to be determined
	Extra 24	Mission specific placeholder to be determined
	Other	Other not already identified

Backward Compatible with “Iron Sights”

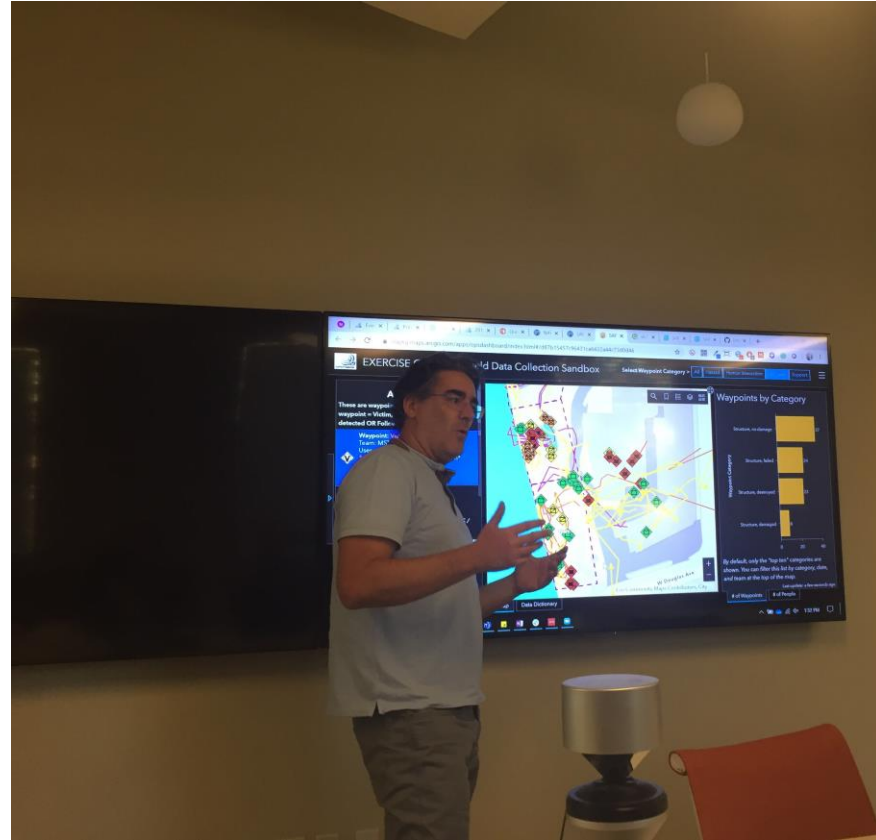
- Import .gpx data
 - Similar schema
 - GPS → Append to feature layer
 - Labor intensive, but possible
- Export via .csv, .xls, .shp, .gdb and KML!
 - *Not a dynamic/live connection



Opportunity for Remote Assistance



SUSAR Training in Wichita, KS



Supervising in real time in Redlands, CA



SAR and First Responder Survey Form

SAR and First Responder Survey

- Developed by the NASPG SAR Working Group
- Adopted by FEMA USAR and IAFC
- Deployment Kit available to deploy in your own organization
- v6 is the current production version, but we are now testing v7




U.S. Department of Homeland Security
Washington, DC 20472

FEMA

US&R GENERAL MEMORANDUM – 2019-050

May 31, 2019

FOR: National Urban Search & Rescue Response System
Task Force Representatives & Program Managers

FROM: Dean Scott, Chief
Operations Section
Urban Search and Rescue Branch 

SUBJECT: US&R General Memorandum 2019-050 – Search Data Collection App Approval
– Survey123

This General Memorandum (GM) is issued to the FEMA National Urban Search & Rescue (US&R) Response System (the System) to make the Survey123 for ArcGIS field app available in support of search data collection.

In 2014 the System established minimum search data collection standards. Since then, data collection proficiency has increased, and new tools and systems have been developed to disseminate that data. The Survey123 for ArcGIS field app is free, can be downloaded from the App Store or Google Play, and a guide for installing Survey123 is attached. The app is supported on iOS, Android, Windows, Mac OS X, and Ubuntu based devices. It works on smartphones, tablets, desktops, and the app takes advantage of the location-tracking capabilities found on mobile devices. Surveys can be collected in both connected or disconnected environments, and surveys that are completed in a disconnected environment can be cached and submitted when a network connection is reestablished.



Survey123 – t v7a Major Changes



T v7a SAR and First Responder Survey

9:52 t v7a SAR and First Responder Field Data Collection Form

Survey instructions, tips, and sharable QR code. Click arrow to left to open.

Event Details: ★ *Open to complete event details and "Set as favorite answers" (using instructions above) to pre-populate future forms. Be sure to reset favorite answers at the beginning of each search operation.*

Team Name *
NAPSG1

Squad Leader *
Doherty

Your Name *
Doke

Search Type *
Primary Search

Operational Period
1

Location *
Select the map to improve location accuracy or search an address / place / USNG. For damage surveys - be sure to "drag" the pin to the building footprint where available.
13S ED 1673 1725 ± 3.8 m

1

10:00 Location

Select the map to improve location accuracy or search an address / place / USNG. For damage surveys - be sure to "drag" the pin to the building footprint where available.

Search location or map coordinate

Map view showing a residential area with a red dashed outline indicating the search area. A red pin is placed on the map.

Esri Community Maps Contributors, Esri, HERE, Garmin, INCREMENT P, METI/

13S ED 1687 1741

2

10:01 t v7a SAR and First Responder Field Data Collection Form

Person Count
1

Human Interaction Comments
OPTIONAL: Please list any additional intel related to the human interactions including safety hazards and rescue method (e.g. airframe, water rescue, vehicles, etc.).

Comments
OPTIONAL: Please list any additional pertinent intel.

Follow-Up *
Select an option below to indicate if follow-up is needed.

☒ Needs Follow-Up
☐ Assigned
☐ Completed
☐ No Follow-Up Needed

Follow-Up Priority
Select an option below to indicate the importance of follow-up.

☒ Critical to Life Safety
☐ High Importance
☐ Not Critical

3



Survey123 – t v7a Major Changes



T v7a SAR and First Responder Survey

9:15 t v7a SAR and First Responder Field Data Collection Form

USNG
13S ED 1673 1725

Degree Decimal Minutes
39°00.247'N 104°48.406'W

Waypoint *
Structure, failed

Comments
OPTIONAL: Please list any additional pertinent intel.

Address or Location
OPTIONAL: Street Address or Location Description
1198 Kelso Pl, Colorado Springs, Colorado, 80921

Structure Type
☒ Residential Single-Family Dwelling
☐ Residential Multi-Family Dwelling
☐ Commercial
☐ Industrial
☐ Other
☐ Public Infrastructure

Damage Comments
OPTIONAL: Please list any additional intel related to the damage including safety hazards.

4

9:13 t v7a SAR and First Responder Field Data Collection Form

Waypoint *
Animal issue

Animal Count
2

Animal Issue Comments
OPTIONAL: Please list any additional intel related to the animal issue.
Two dogs need rescued; one is aggressive

Hazard Comments
OPTIONAL: Please list any additional intel related to the hazard including safety hazards.
Aggressive dog

Comments
OPTIONAL: Please list any additional pertinent intel.

Follow-Up *
Select an option below to indicate if follow-up is needed.
☒ Needs Follow-Up
☐ Assigned
☐ Completed
☐ No Follow-Up Needed



5

10:12 t v7a SAR and First Responder Field Data Collection Form

Does the waypoint relate to a community lifeline?
A lifeline provides indispensable service that enables the continuous operation of critical business and government functions, and is critical to human health and safety, or economic security. For guidance, see [Community Lifeline Guidelines for Survey123](#)
☒ Yes
☐ No

Lifeline
What lifeline is related to the current waypoint?
☐ Communications
☐ Energy (Power & Fuel)
☐ Food, Water, Sheltering
☐ Hazardous Material
☐ Health and Medical
☐ Safety and Security
☐ Transportation

OPTIONAL: Please add up to (3) photos if you think it will help verify your field observations or if instructed to do so.
Use the icons below to capture a new photo or browse and select a photo from your device. Please take/use photos in landscape orientation.

Photo 1
 

6



QuickCapture

10:18 SAR QuickCapture for NAP... Team Name: N/A

Tracklog

Recon Hasty / Rapid

Primary Secondary, high

Team Name

NAPSG1

Enter your team name here.

CANCEL DONE

Human Interactions

Incident Support

Hazards

Damage Surveys

Extras

GPS accuracy 56 ft

1

10:18 SAR QuickCapture for NAP... Team Name: NAPSG1

Tracklog

Recon Hasty / Rapid

Primary Secondary, high

Secondary, low Targeted

Personnel Accountability Report

Live Tracking (Continuous Points)

Human Interactions

Incident Support

Hazards

Damage Surveys

Extras

GPS accuracy 39 ft

2

10:18 SAR QuickCapture for NAP... Secondary, low Targeted

Personnel Accountability Report

Live Tracking (Continuous Points)

Human Interactions

Number of People

1

DONE

Rescued Victim, detected

Victim, confirmed Human remains

GPS accuracy 13 ft

3

10:19 SAR QuickCapture for NAP... Secondary, low Targeted

Personnel Accountability Report

Live Tracking (Continuous Points)

Human Interactions

Incident Support

Hazards

Damage Surveys

Structure, destroyed Structure, failed

Structure, no damage Structure, damaged

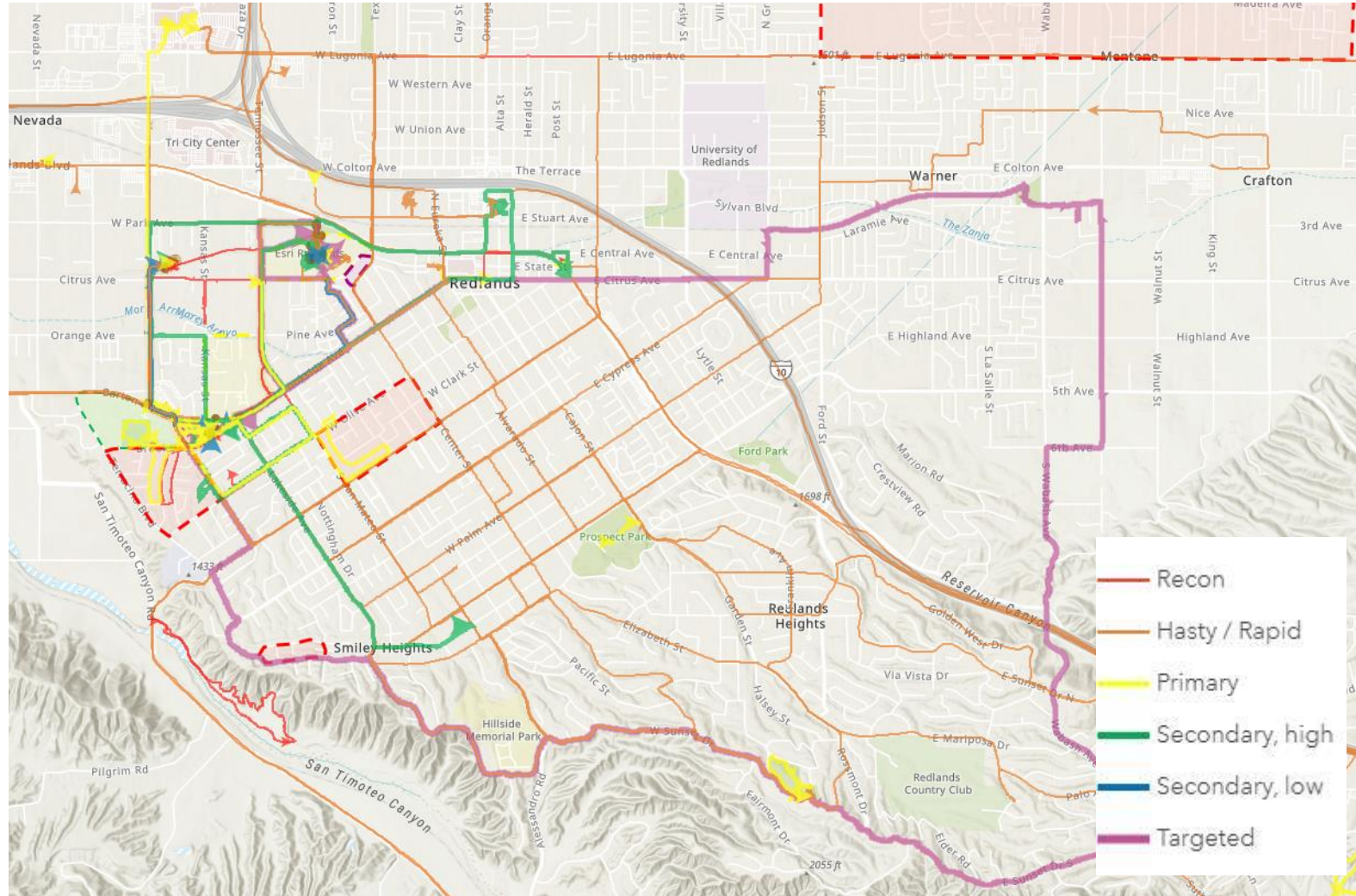
Extras

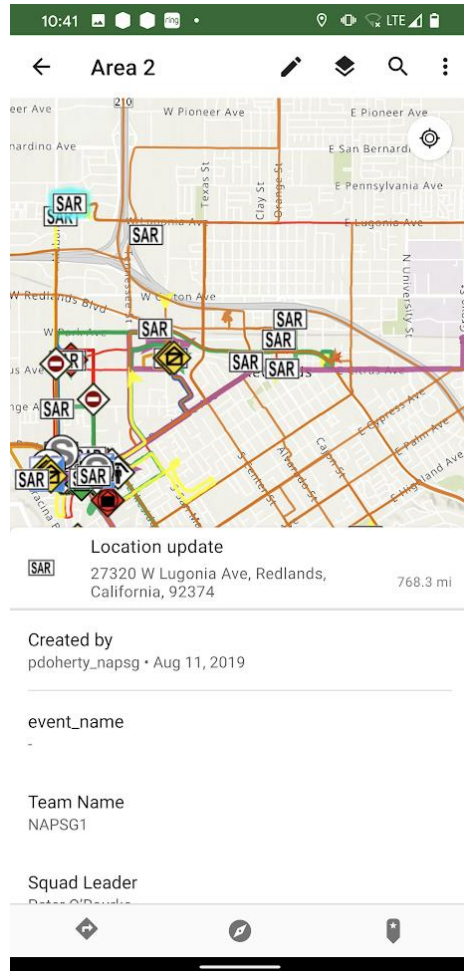
GPS accuracy 32 ft

4

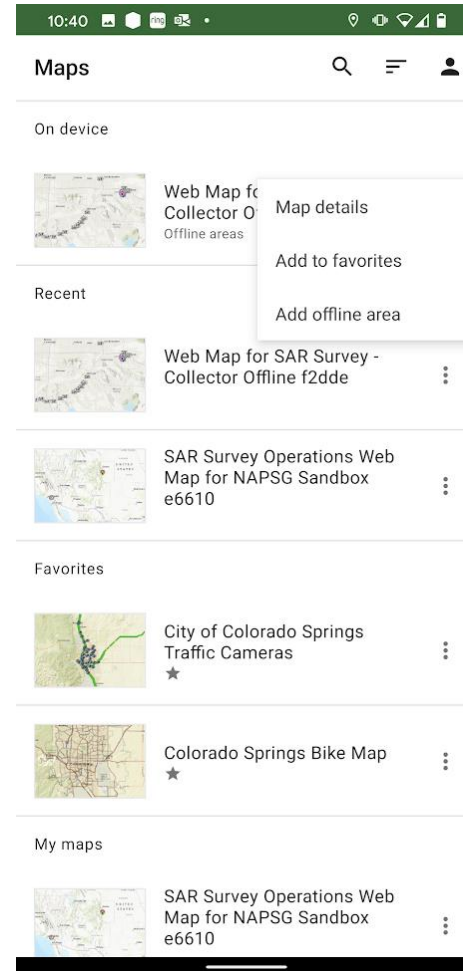


QuickCapture “Tracks”

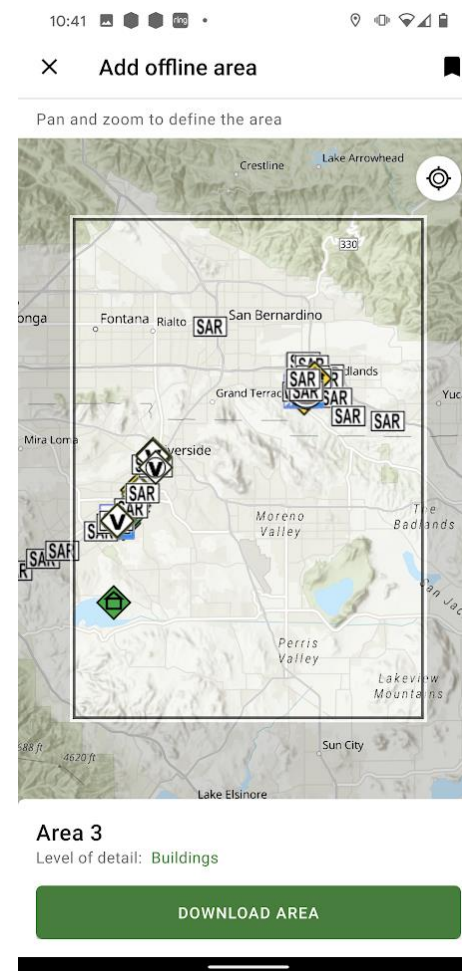




1



2

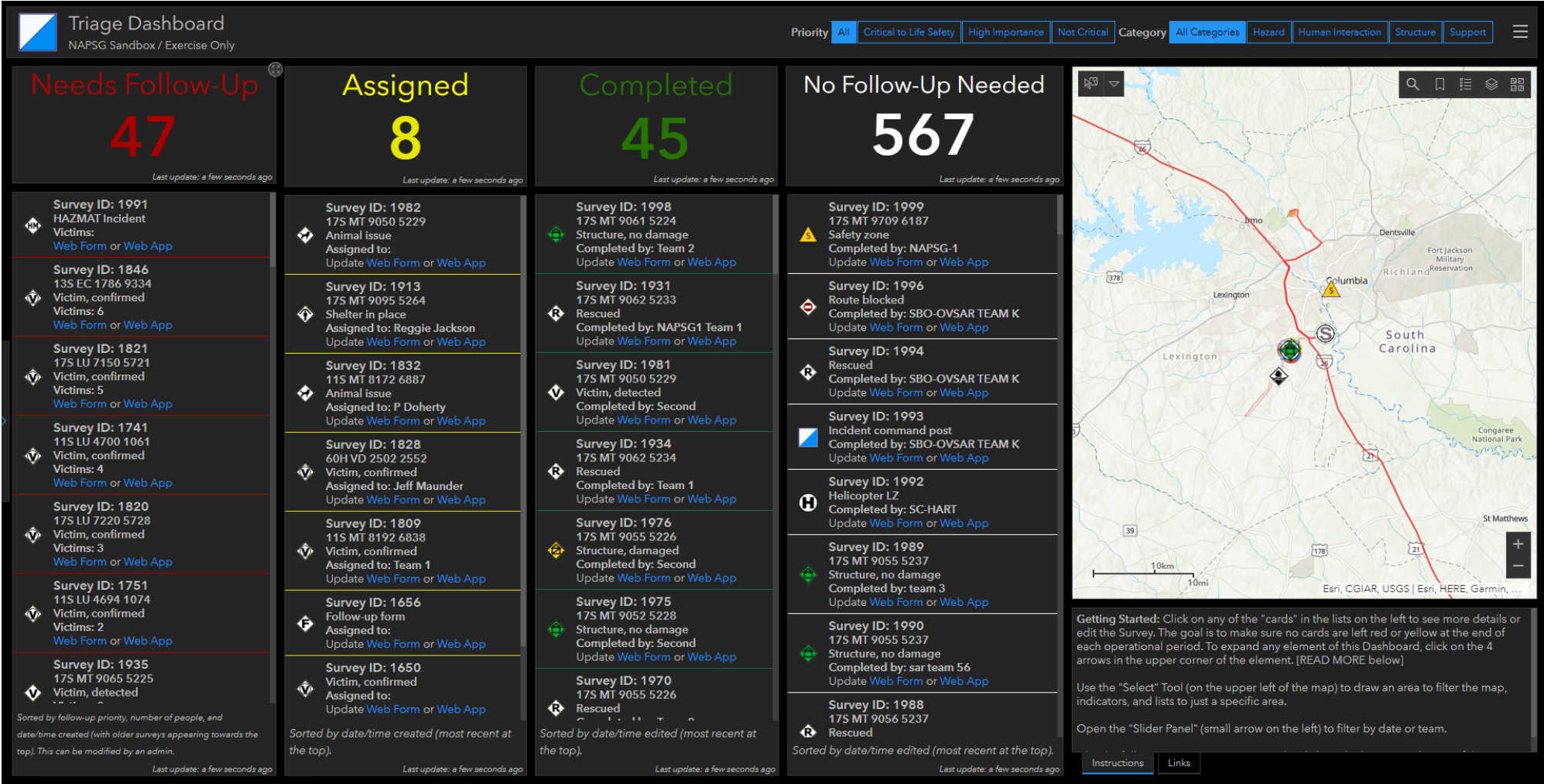


3

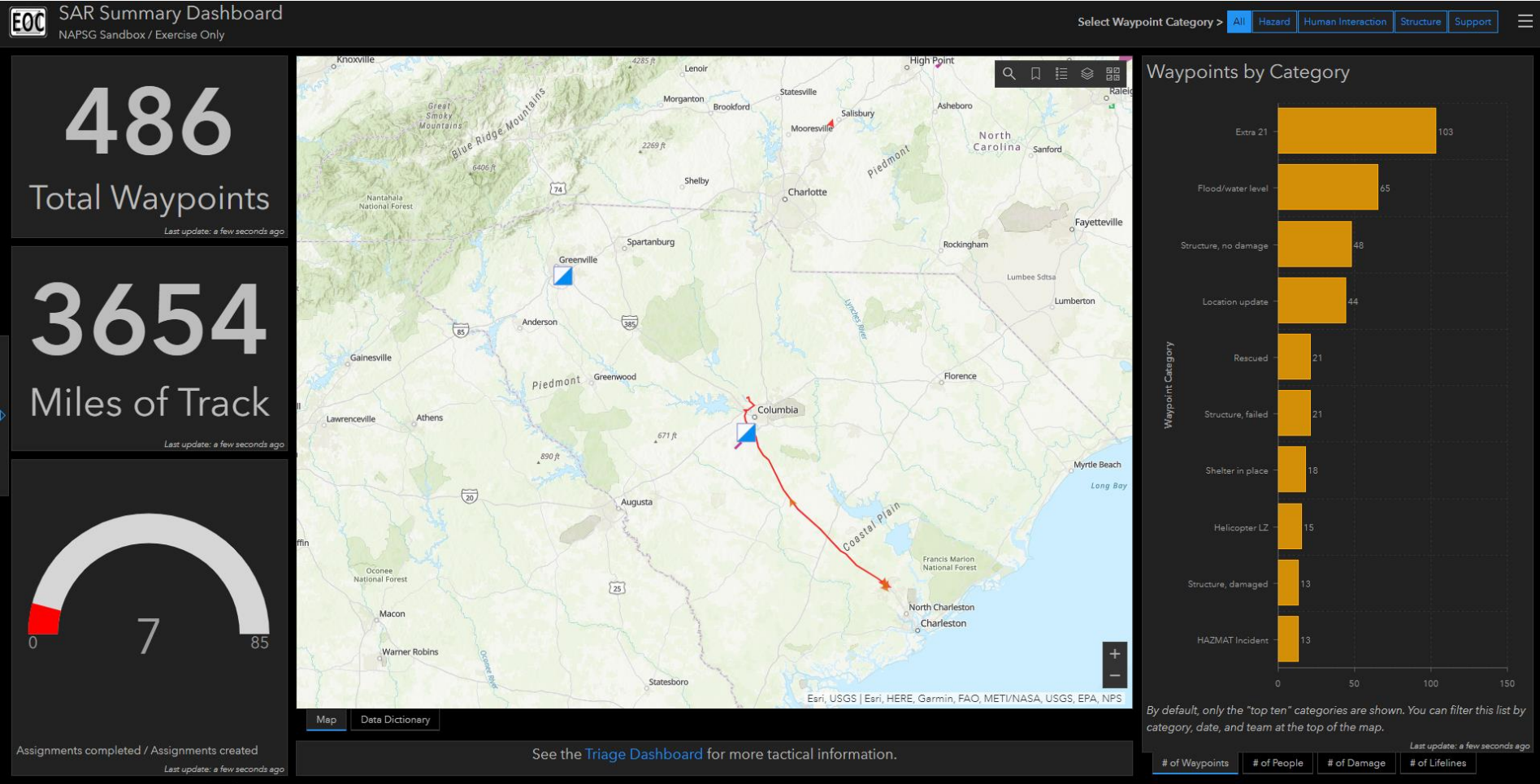
Supporting Applications

Moving Beyond Dots on Maps and Reports!

Triage / Tactical Dashboard



Summary Dashboard



Intel Manager

[illegible]

Survey123 Reports

t v7a SAR and First Responder Field Data Collection Form

Team Name: CA-TF2 Search Type: [dropdown]

ADDRESS: 543 Del Valle Way

BUILDING USE: Residential WAYPOINT SYMBOL: Structure Destroyed

FOLLOW-UP: Follow Up Needed COMMUNITY LIFELINE: No

RESIDENTS NAME: [text] # OF ADULTS: 10 # OF KIDS: [text]

Image info

Photo 1

Jan 15, 2020 10:26 AM

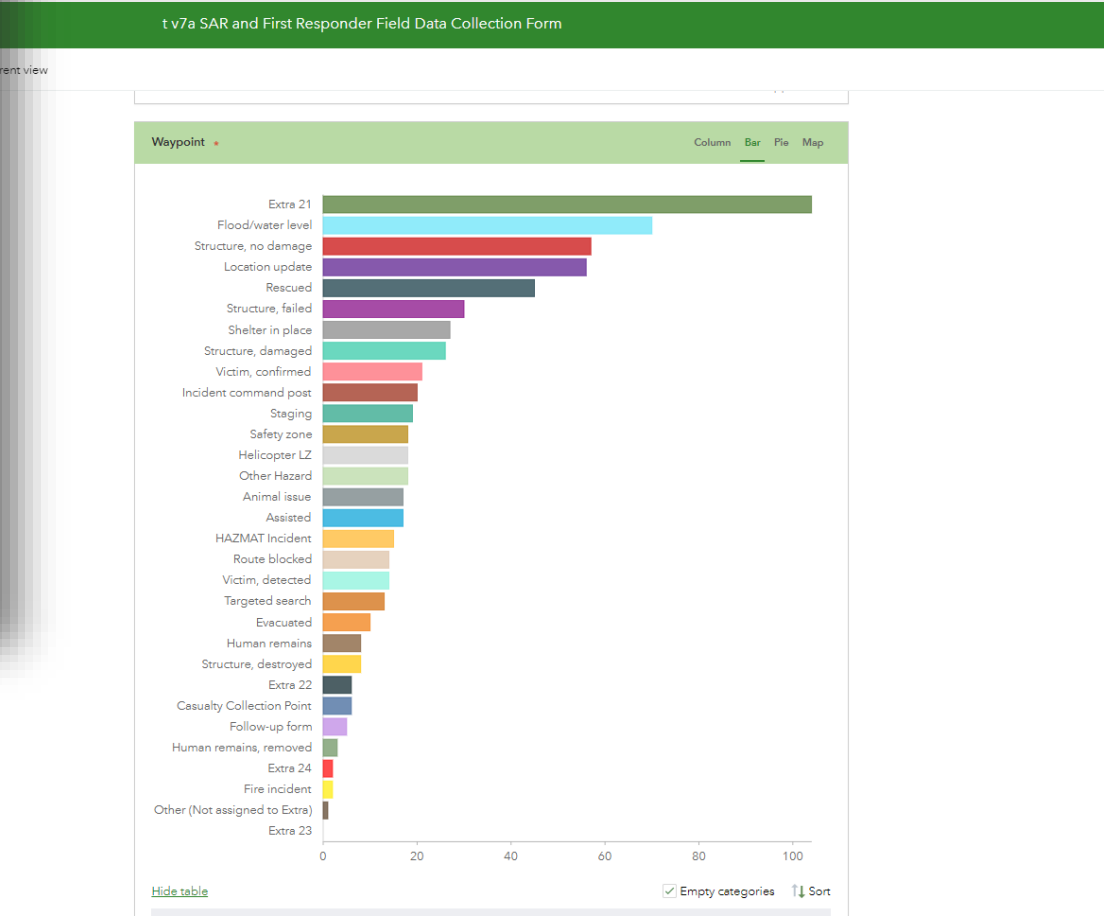
image0-20200115-182643.jpg 1440 x 1920 444.2KB

Apple iPhone 7 f/1.8 1/4160s 3.99mm ISO20

276.7°

Newhall Ranch, California Lat: 34.42638 Lon: -118.66566

[Map view]



Geospatial Game Plan

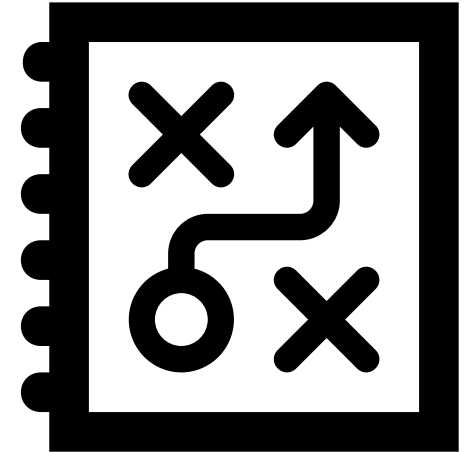
Game Plan

NAPSG SAR Working Group

- Start with *identifying core information needs
- Develop a game plan for addressing those information needs. Test it. Refine it.

Agency

- Host – Decide where you will host the platform?
- Team - Build the Team (GIS/TIS, Trainer, Champion)
- Access - Do the right people have access to the right content?
- Sharing - Do you have a data sharing agreement in place?



Game Plan and Data Sharing

Core Info Need	Public	First Responders	Emergency Managers	Field Game Plan	Operational Game Plan	Technical Game Plan	Data Sharing	Link to App	Link to Layer
Search Coverage (Tracklog)	N/A	What areas have been explicitly searched?	N/A	Field Teams will use QuickCapture and start tracking, choosing their mission type - Recon, Rapid / Hasty, Primary, Secondary High, Secondary Low, Targeted.	Incident Command Staff will review incoming tracks and determine which areas need to be searched next, searched again, etc. Emergency Management Staff can access this same information with permissions and signing the data sharing agreement.	Incident Command Staff will use a Web AppBuilder Application to create and update assignment areas. Emergency Management Staff can assist in this process based on spatial analysis and modeling of high priority areas by accessing the Web App or editing the feature layer directly.	SC First Responders and their ESF9 partners have full access (e.g., SUSAR, FEMA US&R, USCG). External agencies (e.g. FEMA) can request access, subject to approval and brief from SCERTF. The Public will have no direct access to this data.		
Search Assignment Areas	N/A	What areas have been searched? What areas have been assigned? What areas have not yet been searched?	Based on the hazard and vulnerability, what areas are most likely to have victims in need?	Field Teams will use Explorer for ArcGIS to receive assignments on their devices, printed maps as a backup.	Incident Command Staff will create assignments and update their status. Emergency Management Staff can access this same information with permissions and signing the data sharing agreement.	Incident Command Staff will use a Web AppBuilder Application to create and update assignment areas. Emergency Management Staff can assist in this process based on spatial analysis and modeling of high priority areas by accessing the Web App or editing the feature layer view directly.	SC First Responders and their ESF9 partners have full access (e.g., SUSAR, FEMA US&R, USCG). SC Emergency Managers have read-only, and integration access. External agencies (e.g. FEMA) can request access, subject to approval and brief from SCERTF. The Public will have no direct access to this data.		
Human Interactions	N/A	Where are rescues needed vs already occurred?	Where are people sheltering in place?	Field Teams will use Survey123 / QuickCapture waypoints = Assisted, Evacuation, Human remains, Human remains removed, Rescued, Shelter in Place, Victim confirmed, Victim detected, Follow-up Form. IMPORTANT: Any Victim confirmed, victim detected will automatically be flagged as "Needs Follow-up / Red".	Incident Command Staff will review incoming reports for any Follow-up = Needs Follow-up / Red and immediately assign the most appropriated resources to resolve the issue. Emergency Management Staff can access this same information with permissions and signing the data sharing agreement.	Field Teams will use v7 of the SAR and First Responder Survey, QuickCapture, and Explorer for ArcGIS accessing the Field App links and QR Code via a Battle Card or website. ICP Staff will monitor incoming surveys for Follow-up and QA/QC using an Operations Dashboard and Web AppBuilder App. Emergency managers can access any of the apps above, or use the hosted feature layer view in their own web maps and apps.	SC First Responders and their ESF9 partners have full access (e.g., SUSAR, FEMA US&R, USCG). SC Emergency Managers involved in ESF9 support have read-only and integration access. External agencies (e.g. FEMA) can request access, subject to approval and brief from SCERTF. The Public will have no direct access to this data.		
Hazards	What areas are impacted?	What hazards are there in the field?	What hazards need to be addressed by other ESFs?	Field Teams will use Survey123 / QuickCapture = Fire Incident, Flood/water level, HAZAMAT, Route Blocked, Other Hazard, Animal Issue. IMPORTANT: Hazards that require follow-up will be flagged as "Needs Follow-up / Red".	Incident Command Staff will review incoming reports for any Follow-up = Needs Follow-up / Red and immediately assign the most appropriated resources to resolve the issue. Emergency Management Staff can access this same information with permissions and signing the data sharing agreement.	Field Teams will use v7 of the SAR and First Responder Survey, QuickCapture, and Explorer for ArcGIS accessing the Field App links and QR Code via a Battle Card or website. ICP Staff will monitor incoming surveys for Follow-up and QA/QC using an Operations Dashboard and Web AppBuilder App. Emergency managers can access any of the apps above, or use the hosted feature layer view in their own web maps and apps.	SC First Responders and their ESF9 partners have full access (e.g., SUSAR, FEMA US&R, USCG). SC Emergency Managers have read-only and integration access. External agencies (e.g. FEMA, can request access, subject to approval and brief from SCERTF). The Public will have no direct access to this data.		
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SARGIS Hub Page

SARGIS

Search

Sign In

Search and Rescue GIS

Search and Rescue is an inherently spatial problem. This site provides resources for geospatial and SAR professionals to better manage SAR incidents.

USAR Field Data Collection Form - Production Version (v6)

This is the deployment kit for the current production version of the SAR and First Responder Field Data Collection Form. This form has been adopted by the Federal Emergency Management Agency (FEMA) Urban Search and Rescue Response System and the International Association of Fire Chiefs (IAFS). It was developed by the National Alliance for Public Safety GIS (NAPSG) Foundation Search and Rescue working group and is maintained and updated by NAPSG staff.

v6

R

Deployment Kit

Deployment Kits - SAR and First Responder Field Data Collection Form

Zip file with .xlsx document and associated media files that you can download and use as a template to deploy a Survey123 survey for recording the location of human interactions, hazards, damage surveys, and operation support. Updated June 26, 2019.

Below is a link to the NAPSG "Sandbox" version of the SAR and First Responder Field Data Collection Form which can be opened in the Survey123 app as well as links to some of the associated web apps. These are provided to the community to test and are open to the public. With the exception of QuickCapture, logins are not required to access them. This form and these apps are for EXERCISE ONLY and are not for real-world response.

<https://sargis.napsfoundation.org>



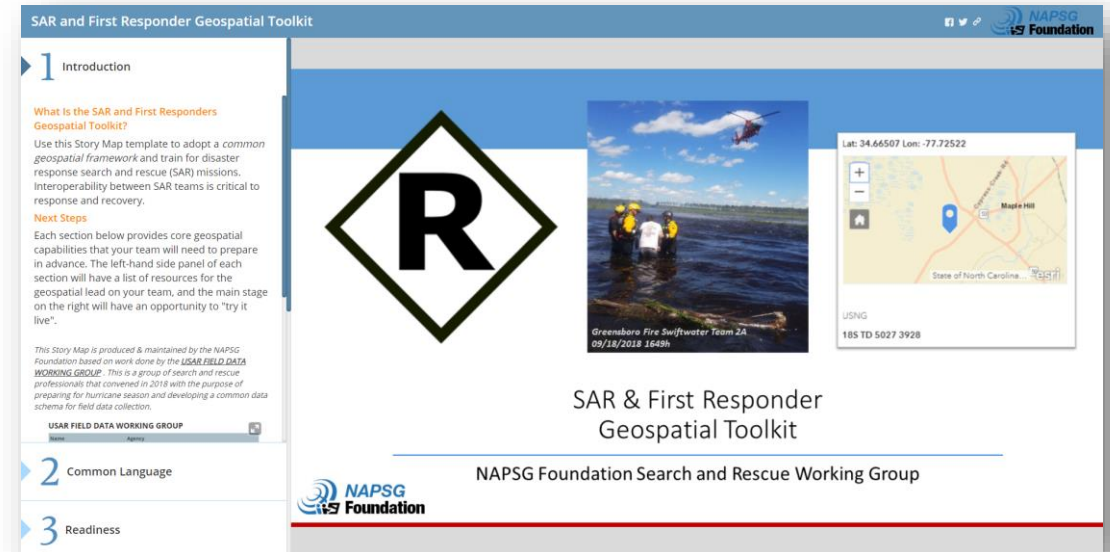
EM
GEO
FORUM



45

SARGIS Hub

1. Resources by role
2. Links to training videos / just in time training
3. Points of contact
 - FEMA Urban Search and Rescue
 - International Association of Fire Chiefs
 - NSARC Geospatial Working Group*
4. Sandbox for testing geospatial tools –
NOT FOR REAL-WORLD RESPONSE



Incident Battle Card

20200128 Southeast Exercise – Field Ops Battlecard

*Explorer optional



SAR Survey
Operations Web
Map for NAPSG
Sandbox e6610



1. Install [Explorer App](#)
2. Sign in not required for this exercise.
3. Scan QR Code to open "SAR Survey Operations Web Map for NAPSG Sandbox e6610"



t v7a SAR and
First Responder
Survey



1. Install [Survey123 App](#)
2. Sign in not required for this exercise.
3. Scan QR Code to open "t v7a SAR and First Responder Survey"



t v7a SAR
QuickCapture for
NAPSG Sandbox



1. Install [ArcGIS QuickCapture](#)
2. Sign-In
Username: naps10
Password: naps2020
3. Download "SAR QuickCapture Sandbox (v7)"

Additional resources at <https://sargis.napsgfoundation.org>

Deployment Options

FEMA	Third Party	Host Yourself
<ul style="list-style-type: none">- fema.maps.arcgis.com- Uses the SARWG Templates- FEMA Task Force use only- Contact Adam Barker and Lance Gilmore	<ul style="list-style-type: none">- Pay a third-party to host in ArcGIS Online and maintain the platform based on the SARWG Templates- Bring your own GIS Staff OR pay for contract support- Requires data sharing policy	<ul style="list-style-type: none">- Use the SARWG Template to host the Survey and supporting apps in ArcGIS Online- Recommended this is done at a State or Regional level to reduce duplication and simplify integration- Bring your own GIS Staff OR pay for contract support

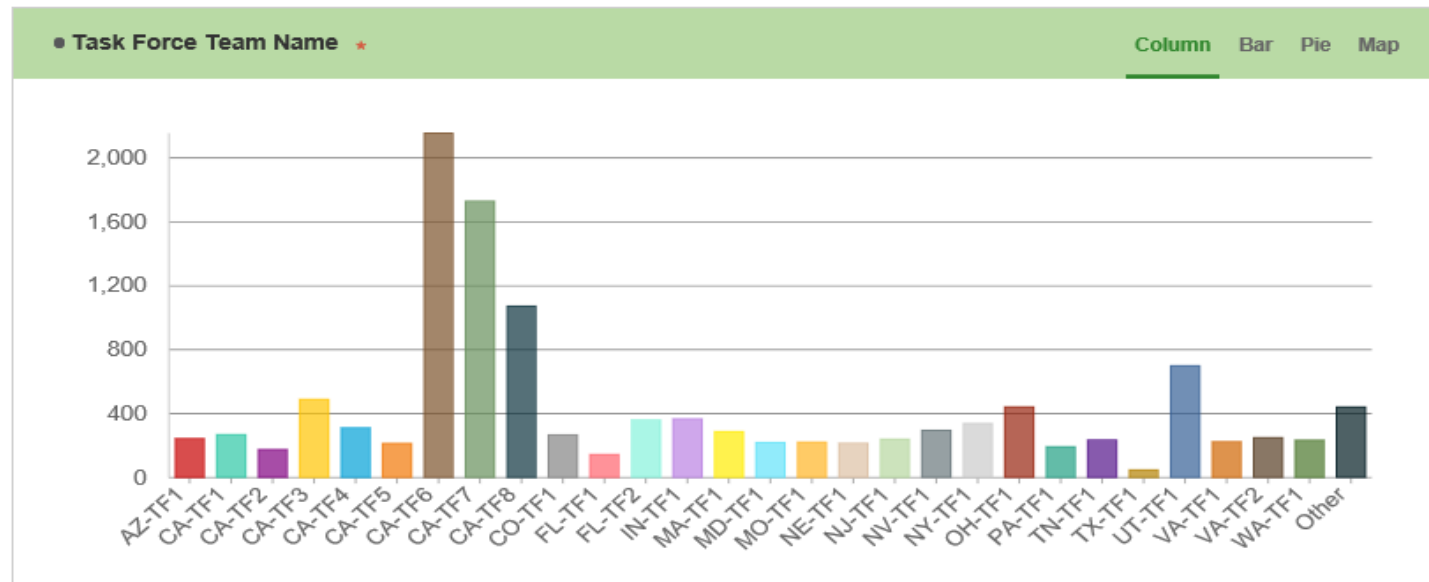


FEMA

FEMA USAR Update

FEMA US&R Program

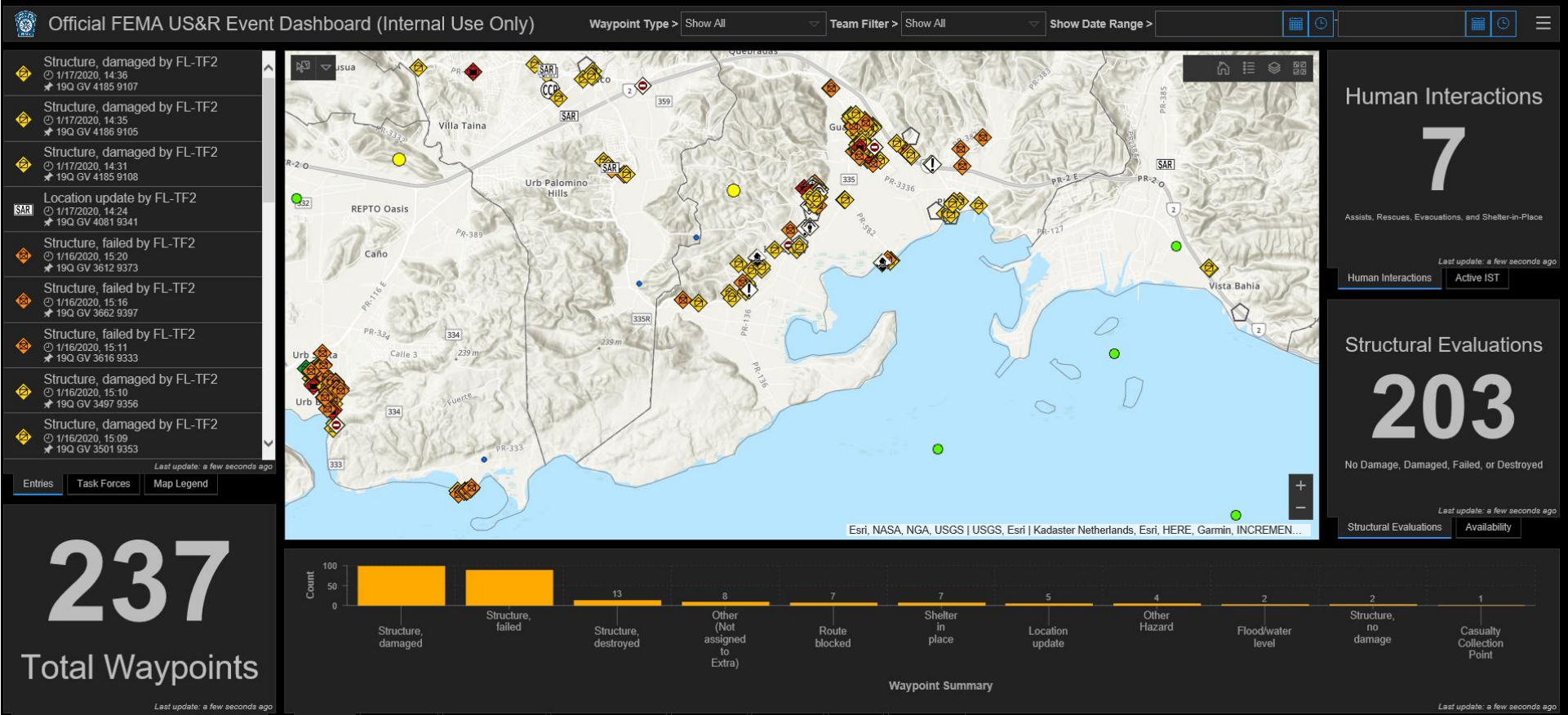
- June 2019, Issued US&R Program Directive 2019-004 – Guidance for 2017 Cooperative Agreement Funding – Search Data Collection Devices



FEMA US&R Program

- Since Survey123 was implemented, West Division has taken the lead evaluating additional functionality, potentially using QuickCapture for track logs and delivered the first instructor lead training at their Division meeting in December
- West Division has another workshop scheduled in March, target audience: Search Team Managers, Search Specialists, Planning Team Managers, Technical Information Specialists, Communication Specialists and Task Force Leaders.
- Central and East Division have funding to support similar instructor lead and/or virtual training

FL-TF2 Training



FEMA US&R

- FEMA US&R will adopt the new NAPSG Survey123 schema
- Until explicit notice, we will continue to use the “2019” version
- Once the new schema is out, I will wipe the practice dashboard to create a sandbox for the new survey
- HUB site under development...

What's Next?

- Re-Convened the SAR Working Group
- Adoption of Follow-Up Workflow
 - Red – Needs Follow-up
 - Yellow – Assigned
 - Green - Complete
- Search Data Analytics – e.g., to estimate the % of buildings searched in a search segment
- Data Dictionary between SAR Damage and Preliminary Damage Assessment
- More Training Videos!!!



January 28th SCERTF Exercise
February 20th CO-TF1 Exercise

Geospatial Coordination Calls

- Hosted by the *SAR Geospatial Working Group
- Daily call during Hurricane deployment
 - FEMA US&R
 - NPS/DOI
 - USCG
 - SUSAR
 - Supporting NGOs (e.g., NAPSG, IAFC, Crowdsourced Rescue, Humanity Road, etc.)
 - Emergency Management Agencies
- NAPSG SAR Working Group Slack Channel

**Under consideration for affiliation with the NSARC*

We Need You!

1. Follow the Initiative <https://sargis.napsgfoundation.org/pages/usar>
2. Use the Sandbox to train and send us your feedback!
3. Share information with State SAR and GIS Coordinators

Interested in Geospatial Coordination for SAR?

Scan the QR code to open the survey on your device. [Click to download](https://arcg.is/1m88Tj)



<https://arcg.is/1m88Tj>



Thank you!

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