After-Action Report and Improvement Plan

North Central Region, Colorado Flood Preparedness Pilot

June 2018

Developed with support from the US Department of Homeland Security (DHS) Science and Technology Directorate (S&T) under agreement HSHQDC-16-C-B0016

National Alliance for Public Safety GIS (NAPSG) Foundation
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I. Acknowledgements

Floods are the most common natural disaster in the United States and are only increasing in frequency, magnitude, and cost as a result of ever-changing weather patterns and increasing development. When a flood occurs, first responders and operators must make life and death decisions under considerable time constraints. Understanding the key challenges often faced by flood-prone communities, necessitates the engagement of first responders and key stakeholders at the local level. NAPSG Foundation and the DHS Science and Technology Directorate (S&T) are grateful for the invaluable contributions in time and expertise that the following agencies and organizations contributed in the testing of the National Flood Preparedness Guideline. They provided invaluable feedback for the planning, development, design, and conduct of the North Central Colorado All-Hazards Region Flood Preparedness Table-top Exercise on April 16, 2018, culminating in a final Drill and Stress Test conducted on May 17, 2018.

Agency / Organization
Adams County, Colorado
Arapahoe County, Colorado
City of Aurora, Colorado
City of Boulder, Colorado
Boulder County, Colorado
City of Broomfield, Colorado
Broomfield County, Colorado
City of Denver, Colorado
Denver County, Colorado
Douglas County, Colorado
Gilpin County, Colorado
Jefferson County, Colorado
North Central Colorado All-Hazards Region (NCR)
Rocky Mountain Rescue Group
State of Colorado
Urban Drainage and Flood Control District
Esri

NAPSG Foundation and DHS S&T appreciate the ongoing commitment by the homeland security/public safety and GIS communities as we work together to solve key challenges around flood disasters.

II. Executive Summary

The problem public safety officials often face when making difficult decisions is not about the availability of data – rather, it is about how data becomes actionable information that changes the outcomes for survivors. For an effective response, the right information must be delivered to the right people at the right time in the right format.

To better understand the key challenges often faced by flood-prone communities, in 2017 NAPSG Foundation worked with first responders across the country to develop a national flood preparedness guideline. The guideline addresses key workflows, including the information needs of first responders, to help Geographic Information Systems (GIS) support staff compile and deliver critical information at the right time to support data-driven decision making.

Following the release of the guideline, NAPSG Foundation partnered with two pilot communities with experience in different types of flooding hazards to test, validate, and refine:

1. The key challenges and priority information needs that were identified in the National Guideline; and
2. A Prototype Toolkit of data, maps, and applications for each phase of a flood disaster, from preparedness through recovery.

III. Flood Preparedness Pilot Overview

Major Milestones

Requirements Gathering Session – Esri Broomfield Office – 1 International Court, Broomfield, CO 80020 - March 13, 2018 – 8:30am-2:00pm Mountain Time

Hybrid Functional and Discussion-based (tabletop) Exercise – West Metro Fire Training Facility – 3535 S. Kipling St. Lakewood, CO 80235 – April 16, 2018 – 8:30am-4:00pm Mountain Time.

Final Drill/Stress Test – West Metro Fire Training Facility – 3535 S. Kipling St. Lakewood, CO 80235 – May 17, 2018 – 8:30am-4:00pm Mountain Time.

Pilot Planning and Conduct Team

- David Halstead, Senior Advisor, NAPSG Foundation
- Rebecca Harned, Director National and Federal, NAPSG Foundation
- Paul Doherty, Program Manager, NAPSG Foundation
- Tari Martin, Program Specialist, NAPSG Foundation
- David Runneals, GIS Technician, NAPSG Foundation
- Carla Boyce, Senior Advisor, NAPSG Foundation
- Denis Gusty, Program Manager, US Department of Homeland Security Science and Technology Directorate (DHS S&T)
- Ronald Langhelm, Program Manager, DHS S&T

Participants

Provided below is a list of agencies or organizations and their representatives that participated in the Requirements Gathering Session, Tabletop Exercise, and the Final Drill and Stress Test. Each agency/organization was asked, when possible, to have representation from staff team capable of filling the following roles:

- Decision Maker/Commander
- Operator or Planning Specialist
- Geospatial Staff/Technologist

Participating Jurisdictions and Agencies	
Adams County	• Emergency Management • The Information Technology & innovation (ITi) • Sheriff's Office
Arapahoe County	• Emergency Management • Sheriff's Office OEM
Boulder County	• Emergency Management • Information Resources
City of Broomfield	• Community Development: GIS Division • Emergency Management
Broomfield County	• Community Development: GIS Division • Emergency Management
City of Denver	• Emergency Management • Technology Services
Denver County	• Emergency Management • Technology Services
City of Aurora	• Emergency Management
Denver Water	• Dam \Management
Douglas County	• Emergency Management • Information Technology – GIS Division
Gilpin County	• Emergency Management • Sheriff's Office
Jefferson County	• Emergency Management • IT Services • Sheriff's Office
North Central All-Hazards Region	• Regional Coordination and Governance
Rocky Mountain Rescue Group	• Search and Rescue operations
State of Colorado	• Broadband Office • Public Health and the Environment • Regional Health Information Organization • Division of Water Resources (DWR)
Urban Drainage and Flood Control District	

Observing Agencies and Related Efforts	
Agency or Organization	**Related Effort**
Esri	• Flood Preparedness Tool and Emergency Management Deployment Solution
International Association of Fire Chiefs	• National Mutual Aid System (NMAS)

Pilot Project Summary

Below is a summary of the major milestone outcomes from the Requirements Gathering Session, the Hybrid Technology and Discussion-Based Tabletop Exercise, and the Final Drill and Stress Test. At the start of the Pilot, each of the jurisdictions and participating agencies completed the Capability and Readiness Assessment Tool (CARAT). The assessment will be completed again after the next phase of the effort when the region moves into full-scale implementation and operationalization to assess changes in maturity over time.

For the complete agendas for each of the engagements, refer to the Pilot File Share Folder. For additional detail on exercise design or scenario for the April TTX, refer to the Flood Preparedness Pilot Tabletop Exercise (SITMAN).

Purpose and Objectives

- Support regional efforts to enhance flood preparedness and readiness by applying innovative technology and data analytics;
- Validate information requirements for decision making in flood preparedness and response;
- Leverage existing technology platforms in pilot communities to develop and implement a suite of prototype GIS-based tools/templates that fulfill priority unmet needs and requirements;
- Test and evaluate the prototype tools/templates through a Tabletop Exercise
    - TTX serves as basis to inform updates and enhancements to the prototype tools/templates;
- Conduct final Drill/Stress Test of the prototype tools/templates – the Drill/Stress Test serves as the engagement for transition of the prototype tools/templates to Region;
- Support technical transition of prototype tools/templates to agencies for long-term hosting, implementation, and maintenance; and

- Inform updates to the National Flood Preparedness Guideline for expanded use across the Nation.

OUTCOMES

Pilot project activities focused on achieving the following outcomes:

- Establish a shared understanding of what information is needed to make better decisions in flood preparedness through response and to recovery;
- Have a better understanding of gaps in available data to fulfill information requirements and whether these gaps can be filled through cross-jurisdictional sharing;
- Create a heightened awareness of currently available tools to support planning and operations; and
- Assess how the Flood Situational Awareness Toolkit can support decision making and operations, as well as integrate into existing platforms in the region.

IV. Milestone 1. Requirements Gathering Session

GOAL AND OBJECTIVES

- Confirm core operational information requirements needed by pilot community decision makers for flood preparedness and response;
- Establish baseline understanding of GIS technology, infrastructure, and data sharing and coordination;
- Establish baseline understanding of existing GIS tools for flood planning and response GIS in-use;
- Discuss how data analysis and decision makers employ GIS for flood planning, preparedness, and response activities; and
- Define specific business needs and identify gaps that could be filled through advanced technology.

V. Milestone 2. Tabletop Exercise

Goal and Objectives

Goal

Validate decision maker information needs and inform enhancements to the prototype NCR Flood Situational Awareness Toolkit Prototype.

Objectives

Reliable, timely, and accessible information when a flood occurs is essential to the first responders who must make life and death decisions under considerable time constraints. The pilot activities aimed to identify the critical information needs at each phase of a flood event through the requirements gathering session. They also focused on developing a prototype situational awareness toolkit that brings this information into an actionable format, as well as testing the prototype and making refinements in a regional tabletop and drill/stress test, respectively. The Pilot Project is an opportunity to collectively:

- Validate decision maker information needs for flood events from preparedness through recovery phases;
- Test and evaluate a prototype situational awareness tool for flooding in the NCR that supports preparedness, readiness, response, and recovery;
- Define additional functionality needed for improving decision support tools;
- Identify common data schemas for key incident workflows and facilitate cross-jurisdictional information sharing to fill gaps; and
- Develop and use a geo-enabled planning scenario to prepare for a flood incident based on a historic event.

Exercise Structure

The tabletop exercise was designed to push players to identify information needs and the specific trigger points necessary to take action at each phase of a flood event, from preparedness activities through recovery. Participants and players had the opportunity to discuss the effects of the event, test the sharing of situational awareness information across jurisdictions, agencies or organizations, and systems.

Exercise Assumptions and Guidelines

Participants considered the following exercise ground rules to ensure exercise objectives were met in a reasonable amount of time and that the exercise ran smoothly:

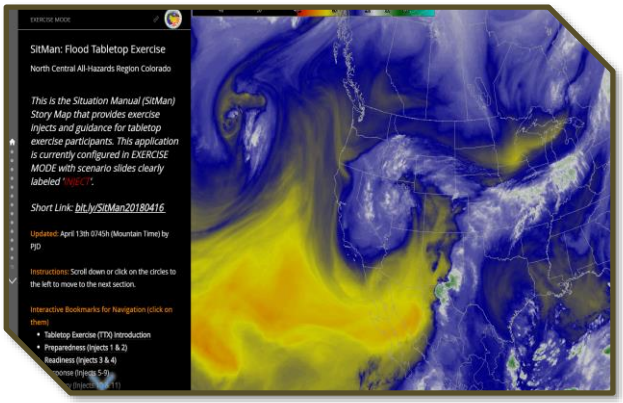
- **No-Fault Environment**
  This exercise provided a no-fault, neutral forum in order to maintain open dialogue and remain open to all perspectives.

- **Not an evaluation or comparison of differing systems currently in place**
  The exercise was not intended to decide which, if any, existing system was better than the others.

- **Not an exercise to test GIS skills**
  The tabletop exercise was not intended to test participants' GIS skills, though part of the exercise focused on specific production and information exchange workflow.

- **Focus your comments and consider time constraints**
  In any exercise, assumptions are necessary to complete discussions in the time allotted. During this exercise, the following assumptions applied:
    - The scenario and likely affects to the communities and surrounding area(s) were plausible, and events occur as they are presented.
    - Participants were asked to "parking lot" certain issues and discussions due to time constraints.

FLOOD TABLETOP EXERCISE SCENARIO



Story Map Briefing driving scenario play and Prototype Toolkit

The exercise was based on a single historic scenario to frame the discussion. All participants received the injects at the same time via a Story Map Briefing. The Story Map Briefing and Prototype Toolkit was shared with all participants to complete injects and test the Prototype Toolkit. Since this was a technology exercise, the scenario was not the focus of the exercise. The scenario was only intended to provide incident context and drive discussion on information needs throughout a flooding event. This exercise was designed so that any other historic or fictitious event related to a community's flood risk may be substituted with minor modifications.

The exercise scenario was based on historic data from the 2013 Colorado floods and adapted for this exercise.

On September 9, 2013, a slow-moving cold front stalled over Colorado, clashing with warm humid monsoonal air from the south. This resulted in heavy rain and catastrophic flooding along Colorado's Front Range from Colorado Springs north to Fort Collins. The situation intensified on September 11th and 12th. Boulder County was the most affected area, with 9.08 inches recorded September 12th and up to 17 inches of rain recorded by September 15th, which is comparable to Boulder County's average annual precipitation (20.7 inches). This event has been referred to as the 2013 Colorado Front Range Flood, reflecting a more precise geographic extent in and along the Colorado Front Range Mountains.

The flood waters spread across a range of almost 200 miles from north to south, affecting 17 counties. Governor John Hickenlooper declared a disaster emergency on September 12, 2013, in 14 counties: Adams, Arapahoe, Broomfield, Boulder, Denver, El Paso, Fremont, Jefferson, Larimer, Logan, Morgan, Pueblo, Washington and Weld. By September 15th, federal emergency declarations covered those 14 counties, as well as Clear Creek County.

VI. Milestone 3. Final Drill and Stress Test

Goal

Validate decision maker needs and inform enhancements to the prototype Colorado North Central All-Hazards Region Situational Awareness Toolkit.

Objectives

- Based on feedback from the April 16th Tabletop Exercise, define additional functionality needed for improving decision support tools;
- Test and evaluate a prototype situational awareness tool for flooding in the Colorado NCR that supports preparedness, readiness, response, and recovery;
- Refine common data schemas for key incident workflows and facilitate cross-jurisdictional information sharing to fill gaps; and
- Identify priorities for future development in the Colorado NCR.

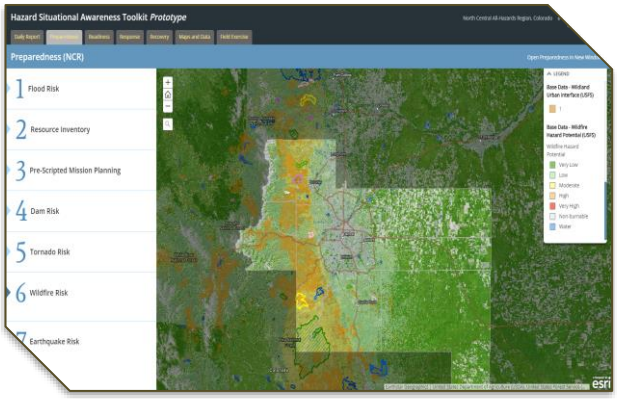
Prototype Situational Awareness Toolkit

[View full agenda]

OUTCOMES: GAPS AND NEEDS IDENTIFIED

PREPAREDNESS: ADDITIONAL HAZARDS

Need to explore how the prototype can be extended to support other hazards for evaluating risk and pre-scripted mission planning.



Preparedness: Added Wildfire Section

Discussion Points:

- Add other regional hazards such as Geologic Rockfall/ Landslide, Snowpack, and Avalanche. **Dam, Tornado, Wildfire, Earthquake Risks added following TTX outcomes.*
- Additional Social Vulnerability factors such as language spoken and number of households without cars should be added to the Situational Awareness widget analysis to aid in evacuation planning.
- The ability to understand changes over time as well as planned development in reference to hazards such as tornado.
- Additional local datasets such as shapefiles already generated for local Hazard Mitigation Plans should be added to assess full risk.
- There is a need to make Hazard Mitigation Plans more operational.
- Dam data, i.e., modelled inundation limits, current EAPs should be added to Dam Hazard Monitoring.
- Wildfire hazard is of immediate concern and geospatial tools should be prepared in the near-term based on lessons learned in the Flood Preparedness Drill. Capabilities of greatest need for the Wildfire hazard include monitoring, situational awareness, and collaborative sharing of initial attack information.

Action Items: Preparedness – Short-Term

- Add Missing Hazards: Geologic Rockfall/Landslide, Avalanche (Avalanche Information Center).
- Follow up meeting NAPSG/Boulder EOC to prep tools for wildfire readiness and response.
- Add subcategories for Vulnerable Populations (language spoken and number of households without cars).
- Add placeholder for link to Hazard Mitigation Plan(s).
- Identify and incorporate Open Space Data.

Action Items: Preparedness – Long-Term

- Add links to and shapefiles generated from HM Plans.
- Add layers for planned/future development.
- Incorporate historic imagery (where available).
- Follow up with DWR / Dam Safety on incorporated dam inundation

PREPAREDNESS: SHELTER INVENTORYING

Need identified for a common data schema shared across the region for the minimum field/data elements required across the region and system to share shelter inventory.

Discussion Points:

- Jurisdictions need to be able to populate additional fields as needed.
- Data on generator pre-connects would be helpful and should be added as an additional field.
- More Esri fields were confirmed as important because they were listed in plain English.
- Mass Care Group has been newly formed and are currently in the process of

Shelter Schema Survey and Results

figuring out how to collect this information from each of the NCR jurisdictions.

Action Items: Shelter Inventorying – Short-Term

- Update Shelter Schema based on survey.
- North Central Region Mass Care Committee Chair will review shelter schema and survey results.

Action Items: Shelter Inventorying – Long-Term

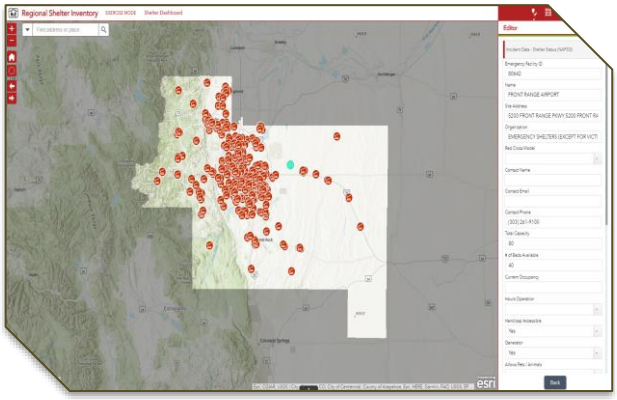
- GIS Infrastructure for hosting Regional Shelter Inventory and SOP's for accessibility and editing.

PREPAREDNESS/READINESS: RESOURCE MANAGEMENT

Need arose to look at CO State Resource Mobilization System to explore if/how data on resources in the system can be shared out as a live service and consumed in other applications for planning and situational awareness.

Discussion Points:

- Daily resource mobilization occurs through CAD systems, but views and data are not shared across jurisdictions. While there is a desire to be able to share such information, priority types of calls have not been agreed upon nor a method.
- State currently owns a Resource Mobilization system but challenges of accessibility exist due to security reasons which has led to minimal use of the system.



Resource Editor: Shelter Example

- Large Scale mutual aid should occur through WebEOC however resource information within the system is not currently available spatially.
- The National Mutual Aid System, a collaboration among the IAFC, WebEOC and Esri, is a cloud-based, spatially enabled, resource management system.

Action Items: Resource Management – Short-Term

- GIS staff should reach out to get access to their respective Computer Aided Dispatch (CAD) Feed.

Action Items: Resource Management – Long-Term

- Determine a schema that could be used to aggregate CAD data across jurisdictions.
- Integrate Resource Mobilization System WebEOC status feeds with GIS infrastructure.

READINESS: LONG-TERM/SHORT-TERM FORECAST MONITORING

There was no common daily information provided for forecasts and a general lack of consistency in forecasting information across the region. Need identified for a common view of more reliable data/information across the region for both long-term and short-term forecasting. Need to geo-enable a live Daily Status Report or Situation Report.

Discussion Points:

- The Cascade Story Map format used as an example dynamic, geo-enabled Daily Report would ultimately need to be customized to jurisdiction and role by those adopting this approach.
- The embedded weather maps in the geo-enabled daily status/situation report are useful in providing a regional view of common forecast data.
- Wildfire is another significant hazard in the region. There are multiple, disparate sources for information on current wildfires, but no current authoritative source from the point of initial attack.
- State does not currently maintain a data layer of EOC Status.
- Other areas that should be monitored during the readiness phase include Public Health, USAR, Transportation, Emergency Notifications, and Planned Events.
- Public Health has data that would be beneficial if shared, i.e., live feed of Epidemiological Monitoring, EMS calls.
- ESF9 – Mountain Rescue are collecting and maintaining data, some in real-time, others at the end of the year. This information is not currently shared/consumed by region for situational awareness.
- Information related to recovery efforts is incomplete or outdated.

- Pre-Planned Events section is needed in the Daily Report including monitoring of social media at large gatherings.
- Regional view of agreed upon high-priority dispatch feeds
- A number of jurisdictions have Emergency Mass Notification systems (Everbridge, Code Red, and Swift Reach were identified) but data within the system is siloed and not accessible. Areas targeted and the locations of no-response are needed in Situational Awareness applications and should be included in Daily Reports during an emergency.
- Maps in the Daily Report should be large enough to interact with easily.

Action Items: Readiness – Short-Term

- Align dynamic Daily Report with local perspective.
- Include Transportation and Special Events sections into Daily Report.
- Add links to all Wildfire Resources and data feeds related to initial attack for Wildfire Monitoring.
- Mock up Editable Web Map for EOC status, add EOC polygon layers (if they exist) and add include link to editor dashboard in Daily Report.
- Ensure maps included in a dynamic report are large enough to interact with or replace with embedded web apps.
- Assign and train daily watch officer how to make updates to the apps.

Action Items: Readiness – Long-Term

- Customized views (Agency/ESF/Local should feed Regional View.
- Flashing alert should be added to the top of any dynamic Daily Sit Report for New/Critical Information.
- Broker relationship with Mountain Rescue to begin sharing data.
- Jurisdictions with Mass Emergency Notifications (Reverse 9-1-1) should work with vendors to consume feeds, i.e., areas notified (polygon), and locations not reached (points).

RESPONSE: TRANSPORTATION

Need to have a region-wide approach to sharing road status and lack a consistent schema / approach for interoperability.

Discussion Points:

- Jurisdictions vary on approach to managing road closures with varying degrees of success. Typically, a sheriff has the authority to close a road and closures are communicated through radios and tracked in CAD systems. There is a need to establish

solid workflows for tracking road closures during day-to-day and transitioning to emergencies. Douglas County has an approach for tracking road closures that could serve as a foundation for a regional approach.

- WebEOC has a road closure board where users can create/update records but they are not in a spatial or in an easily consumable format. Typically, a GIS person would capture road closures in their local WebEOC and manually add to their GIS.
- The Waze Connected Citizens Programs could fill gaps in road closure information. Jurisdictions participating in the program would be the authority and could overwrite closure information. The program in its current form would require each local jurisdiction to purchase GeoEvent Server which may be cost-prohibitive.
- The State DOT maintains state road closures but current policies make accessing the raw data feeds to allow their consumption into a local or regional application challenging.
- There is a need to for mass transit feeds including cameras.

Action Items: Transportation – Short-Term

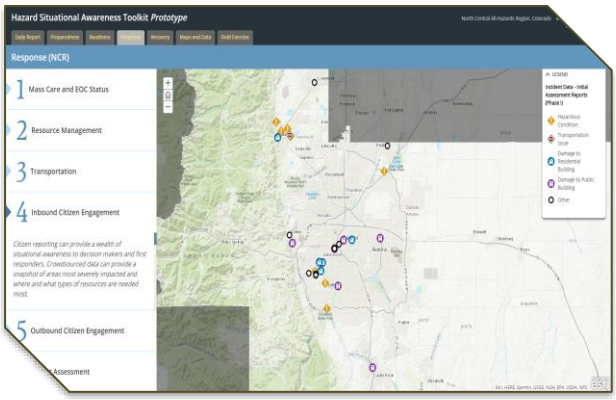
- Determine data availability – RTD, Light Rail Cameras.
- Engage Waze on potential regional partnership for tracking/managing road closures.
- Broker relationship with CDOT to obtain access to state road closure feeds for region.

Action Items: Resource Management – Long-Term

- Agree upon Road closure schema based on Esri Local Government Data Model which already integrates directly with Waze.
- Determine how and where to host GeoEvent Extension for ArcGIS Server which is a requirement for Waze data integration.
- Develop consistent methodology for entering road closures such as a Survey123 form or Collector that could feed WebEOC.

RESPONSE: CITIZEN ENGAGEMENT (INBOUND)

Need for a standardized and reliable/vetted approach to gather and use citizen-generated information during an event towards enhancing situational awareness. This may apply to information shared by citizens through social media, EM-provided information collection forms, 311 systems, and any others.



Inbound Citizen Engagement Application

Discussion Points:

- Standard form shared amongst jurisdictions to collect information with the ability for basic-level vetting of citizen information.
- Potential for regional coordination of a Virtual Operations Support Team comprised of an agency liaison and citizen volunteers to fulfill vetting / flagging / coordination of reports to proper agency.

Action Items: Citizen Engagement (Inbound) – Short-Term

- Develop basic schema for citizen form

Action Items: Citizen Engagement (Inbound) – Long-Term

- Agree on approach for local or regional hosting of form and data

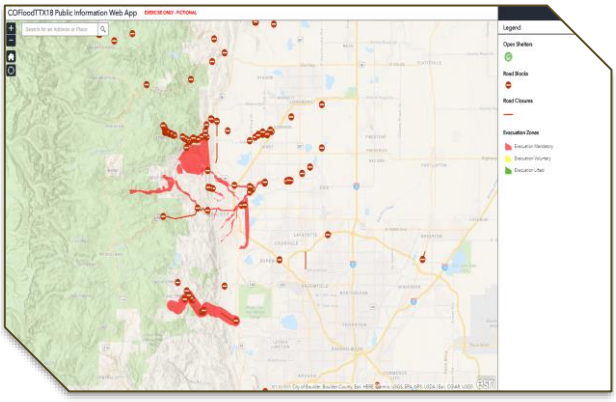
RESPONSE: PUBLIC INFORMATION USING A COMMON MAP

Need a common and shared model for a web-based Public Information Map that can be consistently used to share the most critical information with the public.

Discussion Points:

- Power outage information is important to both response and recovery operations as well as to the public. While some information is available on outages, it is not in a consumable format.
- Desire to embed the Public Information Map directly into local's webpage for communicating emergency information.

- In addition to data layers shown in the demo Public Information Map, the following should be available to be turned on when needed / relevant:
  - Assistance or Recovery Centers – No current feeds exist.
  - Family assistance reunification centers – Add as placeholder. Should be one map the public knows to go to.
  - Points of Distribution
  - Incident Impact Area
  - Public View of Damage Assessments
  - Donation Sites
  - Debris Collection
  - Power Gas and Water Outages
  - Reason for Road Closure



Sample Public Information Map

Action Items: Public Information Map – Short-Term

- Identify which data layers currently exist and add to Public Information Map. Create, symbolize feature classes for the remaining – these may be empty.

Action Items: Public Information Map – Long-Term

- Identify power companies that serve the region and broker access to their feeds.
- Identify Public Information Map(s) approach which provides thematic information based on phase of disaster.

RESPONSE AND RECOVERY: TRACKING OF FIELD TEAMS

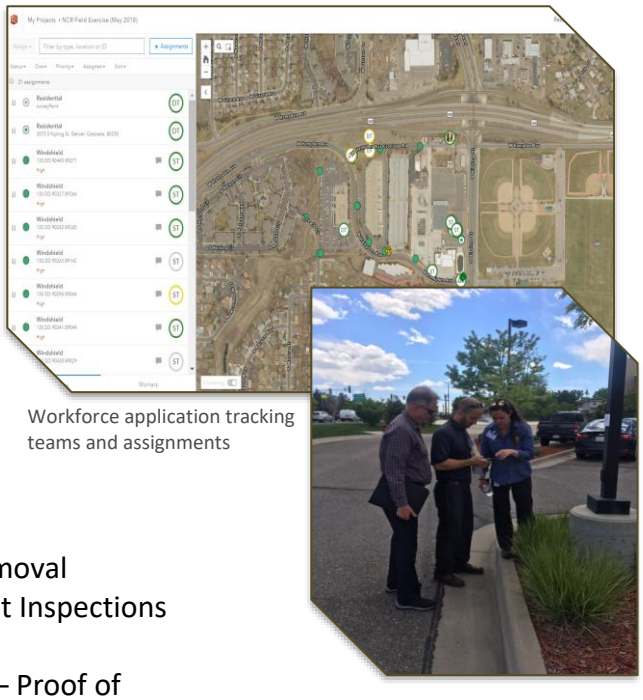
Need to automate and improve capabilities for the tracking and accountability of field teams across the region and basic Incident Command.

Need to establish a consistent data schema and solution set for collecting and analyzing damage assessment information across the continuum: from basic windshield assessment to initial damage assessment to formal damage assessment.

Damage Assessment Dashboard and Survey123 mobile form.

Discussion Points:

- There is a desire for the capability to both track mobile teams and collect data in the field. Limitations with resources, specifically mobile devices and GIS infrastructure at a NCR All-Hazards Region Level, would preclude implementation in the near-future.
- Potential areas for implementation during an emergency (beyond SAR) include:
    - Sheltering
    - Public Health
    - EMS – Public-Private
    - Public Works – Debris, Snow Removal
    - Public Infrastructure – Post Event Inspections
    - Coroners / Mass Fatality
    - Resource Tracking (automated) – Proof of Assignment for reimbursement, System of Record, SOP Forms
- Potential daily use cases (non-event):
    - Building inspectors – septic inspections, tattoo parlors
    - Fire inspections - Vol/Career – hazmat recycling
    - Parks and Recreations (making assignments to check on facilities), assets (picnic tables), trail conditions



Workforce application tracking teams and assignments

- Public Works – asset collection (sign reflectivity)
- Health inspections

Action Items: Mobile Applications – Short-Term

- Share template XLSForms and feature layer schemas that could be deployed locally by jurisdictions, specifically for damage assessment.

Action Items: Mobile Applications – Long-Term

- Evaluate use-cases for regionally hosted field capability for feasibility.
- Develop a repository for field data collection templates to facilitate best practices and data standardization.

VII. Conclusions

Prototype Situational Awareness Toolkit

Over the course of the Pilot Project, key information requirements through each phase of a flood event were identified and sources, where they existed, were compiled. Where gaps existed, available national datasets or broadly used schemas were used to create templates as a starting point for regional discussion. Additionally, workflows, maps, and mission focused applications were developed to facilitate cross-jurisdictional information sharing and to transform data into actionable information for decision makers and first responders.

The Toolkit is available to all the NCR stakeholders to test, inform enhancements, adapt and/or adopt elements as needed. All components have been shared in a public ArcGIS Online group and will serve as the national core information model for Flood Preparedness.

Implementation Strategy

- AAR stakeholder review and feedback
- Address Short-Term Action Items
- CCTA full-scale exercise in 2020. Goal for players to be using this tool. Would need to be completed 6 months prior to allow for training/using.
- Emergency Manager implementation of Predictive Analysis in Preparedness Phase.

- Emergency Operations Center
  - Preparation, testing and usage of Prototype for Wildfire
  - Address Resource Management

**Address reliability and confidence in information feeding tool

KEY RESOURCE LINKS:
NCR Situational Awareness Toolkit: https://arcg.is/11WC4P
Colorado NCR Flood Preparedness Pilot Maps, Apps, and Data: https://arcg.is/04K50G
Share folder for NCR agendas and meeting notes: http://arcg.is/KO11j