

ArcGIS for Emergency Management

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Agenda

- Introduction
- Solution Offering
- What's Next
- Your Feedback

ArcGIS as a Platform

Simple, Open, and Configurable



Transforming the Role of GIS

EXTENDING THE PLATFORM WITH SOLUTIONS

Ready to use workflows and apps that make implementation easier and sustainable.



ArcGIS for Emergency Management

ALIGNING OUR DEVELOPMENT TO SUPPORT EMERGENCY MANAGEMENT

Providing solutions that address the needs of the four phases

Mitigation

- Hazard Analysis
- Vulnerability Assessment
- Infrastructure Work
- Public Education

Recovery

- Economic Recovery
- Debris Management
- Housing
- Health and Social Services



Preparedness

- Emergency Response
- Planning
- Training and Exercises
- Partnership Building

Response

- Life Safety
- Incident Stabilization
- Evacuations and Shelters
- Mass Care

Our Mission ▶ **To help you...**



Emergency Management – June 2017

Mitigation

Hazard Assessment and Analysis
Hazard Vulnerability Analysis
Mitigation Dashboard
Mitigation Plan Status

Resilience

Community Resilience
Resilience Outreach
Resilience Dashboard

Preparedness

Flood Planning
Community Events
CAMEO Tools
Emergency Assistance
Evacuation Zones
My Hazard Information
Floodplain Inquiry
Community Parcels
Community Addresses

Response

Emergency Management Maps
Impact Summary Map
Public Information Map
Road Closures
Incident Briefing
Citizen Reports
Health & Safety Reports
Debris Reporting
Common Operational Picture
Situation Awareness Viewer
Operations Response
Logistics Planning
Incident Status Dashboard
Citizen Service Request
Photo Survey
Shelter Locator

Recovery

Damage Assessment
Photo Survey
Health and Safety Reports
Debris Reporting

Entire Organization

ArcGIS Online for Emergency Management
Community Parcels
Community Addresses
Crowdsource Manager
Crowdsource Reporter
Map and App Gallery

Emergency Management – June 2017

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- Hazard Assessment and Analysis
- Hazard Vulnerability Analysis
- Mitigation Dashboard
- Mitigation Plan Status

Resilience

- Community Resilience
- Resilience Outreach
- Resilience Dashboard

Preparedness

- Flood Planning
- Community Events
- CAMEO Tools
- Emergency Assistance
- Evacuation Zones
- My Hazard Information
- Floodplain Inquiry
- Community Parcels
- Community Addresses

Response

- Emergency Management Maps
- Impact Summary Map
- Public Information Map
- Road Closures
- Incident Briefing
- Citizen Reports
- Health & Safety Reports
- Debris Reporting
- Common Operational Picture
- Situation Awareness Viewer
- Operations Response
- Logistics Planning
- Incident Status Dashboard
- Citizen Service Request
- Photo Survey
- Shelter Locator

Recovery

- Damage Assessment
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- Health and Safety Reports
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Entire Organization

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● What's New/Updated

Disaster Resilience

...the power or ability to return to the original form...

NOAA

- Explore Hazards
- Assess Vulnerability and Risks
- Investigate Options
- Prioritize Plans
- Take Action

State of Colorado

- Educate and Engage
- Risk and Vulnerability Assessment Tools
- Local Resiliency Strategies
- Colorado Community Resiliency Partnership
- Mapping and Land Use Tools
- Develop State and Local Indicators

City of Boulder

- Connect and Prepare
 - Assess Economic Strength
 - Incentivize Businesses
 - Develop Impact Assessment Strategies
- Partner and Innovate
 - Create Citizen Science Strategy
 - Ensure Food System Resilience
 - Make Data Accessible
 - Crowd Source Solutions
- Transform and Integrate
 - Create Community Resilience Centers
 - Foster Climate Readiness
 - Build Sustainability Framework
 - Embed Resilience in Comprehensive Plan
 - Green Infrastructure and Ecosystem Management

Disaster Resilience Solutions

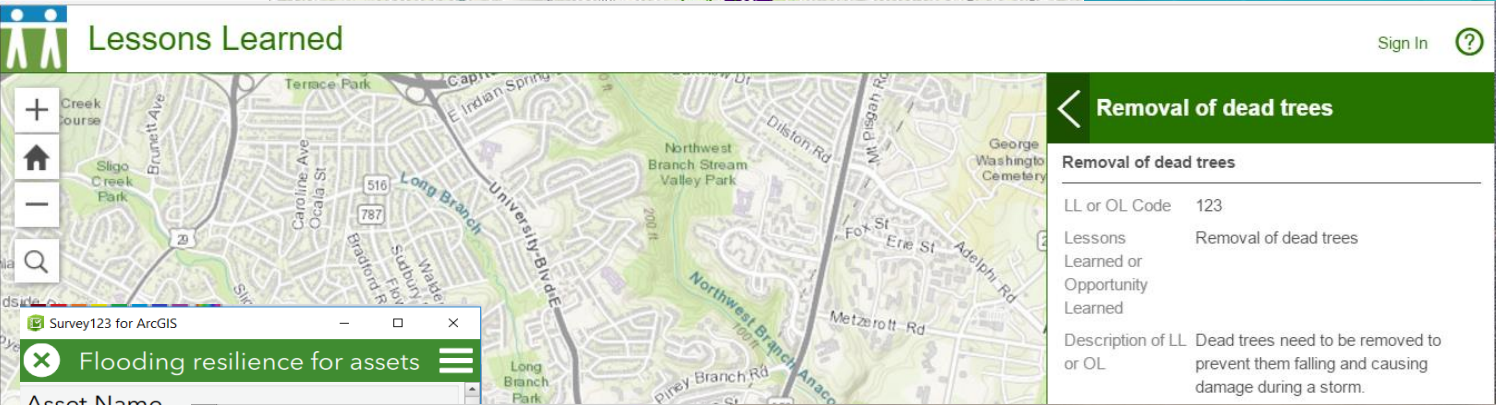
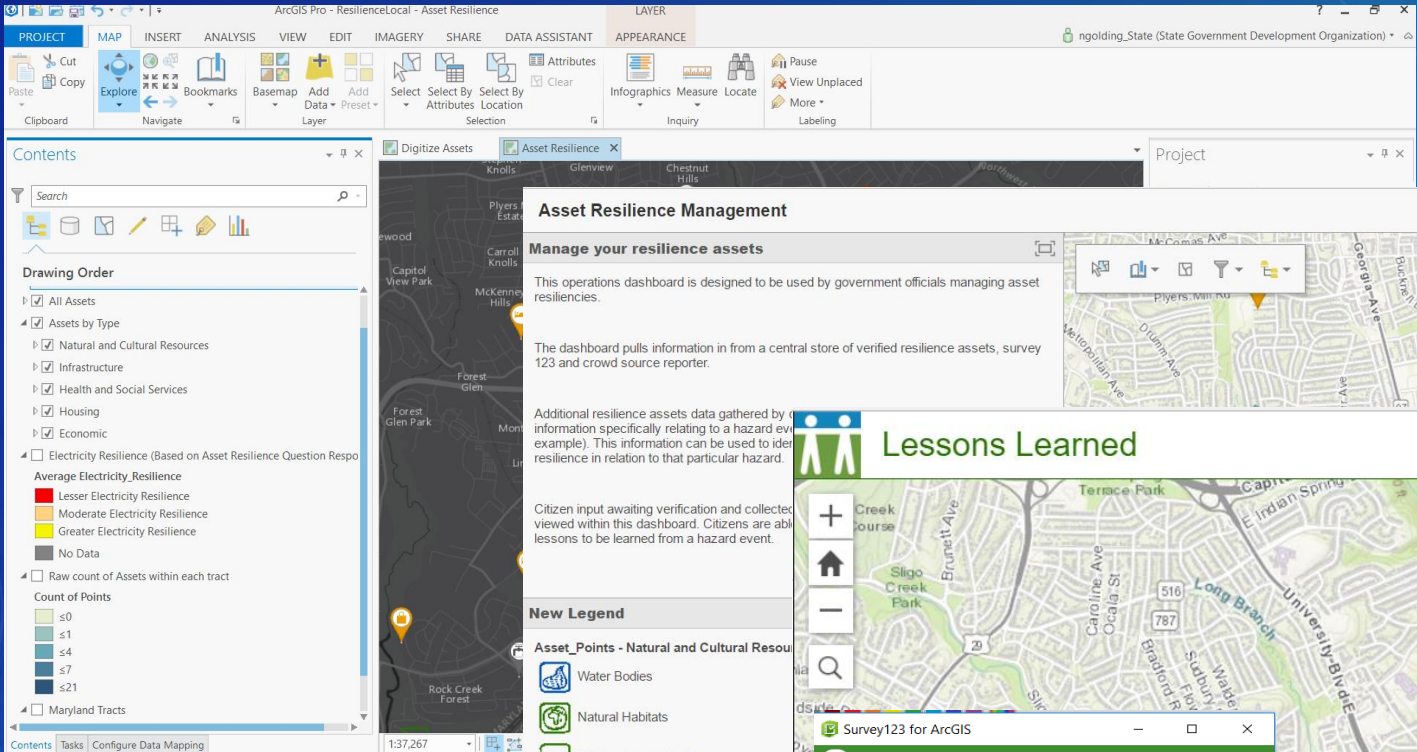
Analyze



Communicate



Engage



Community Resilience

Resilience can be defined as "The ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events." (National Academies of Sciences, 2012).

The aim of the community resilience template is to collate and present resilience information relevant to your jurisdiction(s). This information can then be assessed alongside hazards and vulnerability data.

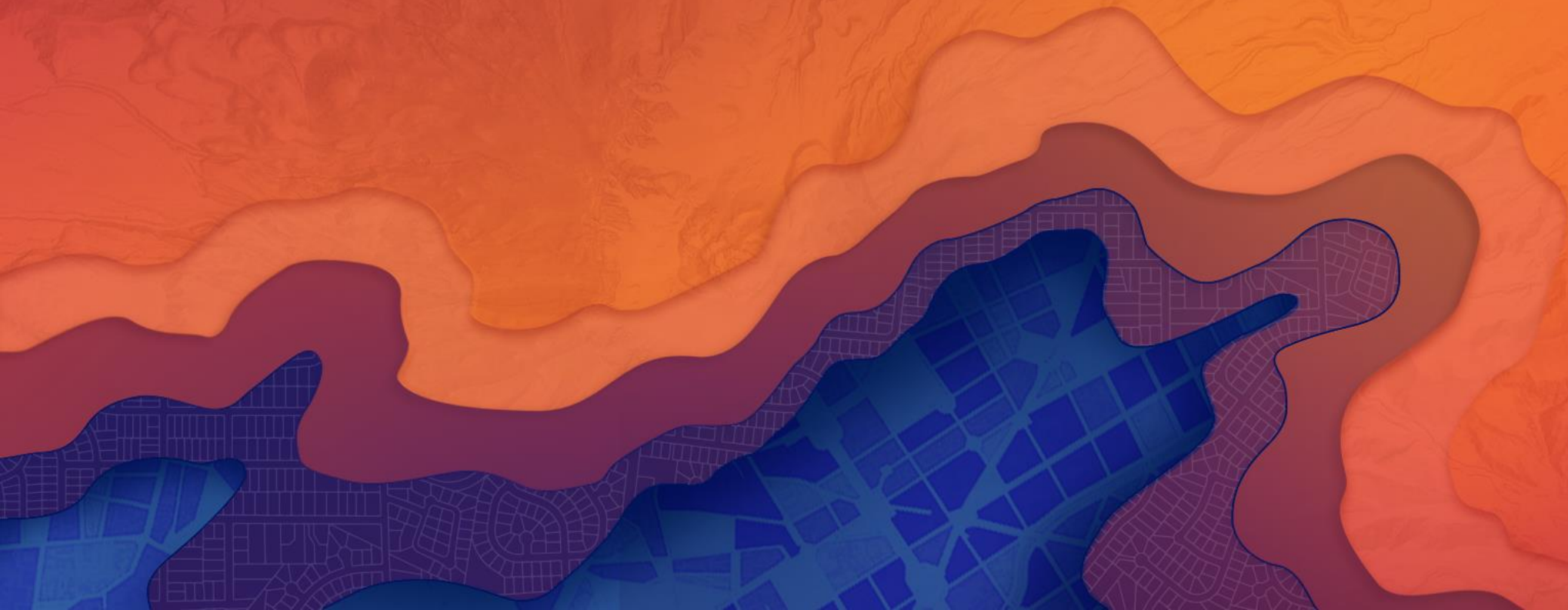
Note: Data and analysis is notional.
Image Source: Seattle Times

Educate



Colorado Office of Resiliency
NY Department of State
Coastal Resiliency Commission
City of Boulder
FERNLeaf/NEMAC

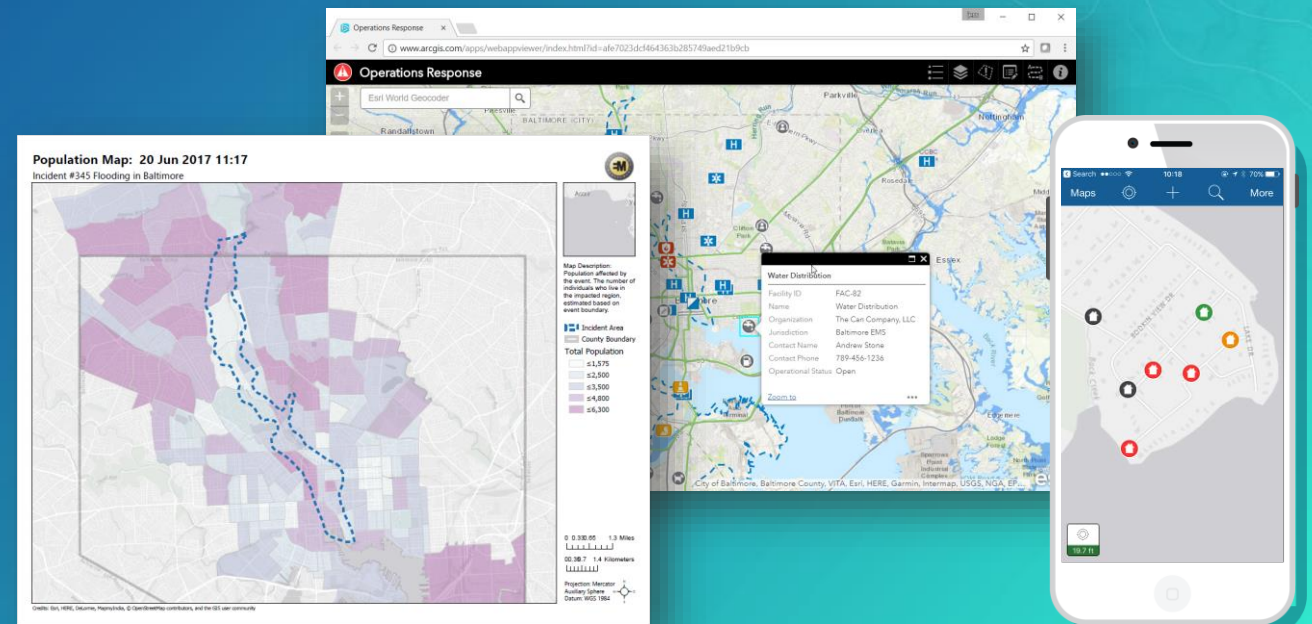
Demo



Emergency Management Maps

A foundation for Emergency Management Solutions

- Enables GIS support staff to:
 - Respond to an incident quickly with map products
 - Simplify the implementation of data and maps
 - Support decision makers with dynamic and actionable information
 - Share incident information via web based and hard copy products
 - Work online and offline



Emergency Management Maps

A foundation for Emergency Management Solutions



... sync workflows targeted for Pro 2.1

Emergency Management Maps

Solution components

Maps

Layers

Symbology

Layouts

Standardized products

Consistent format

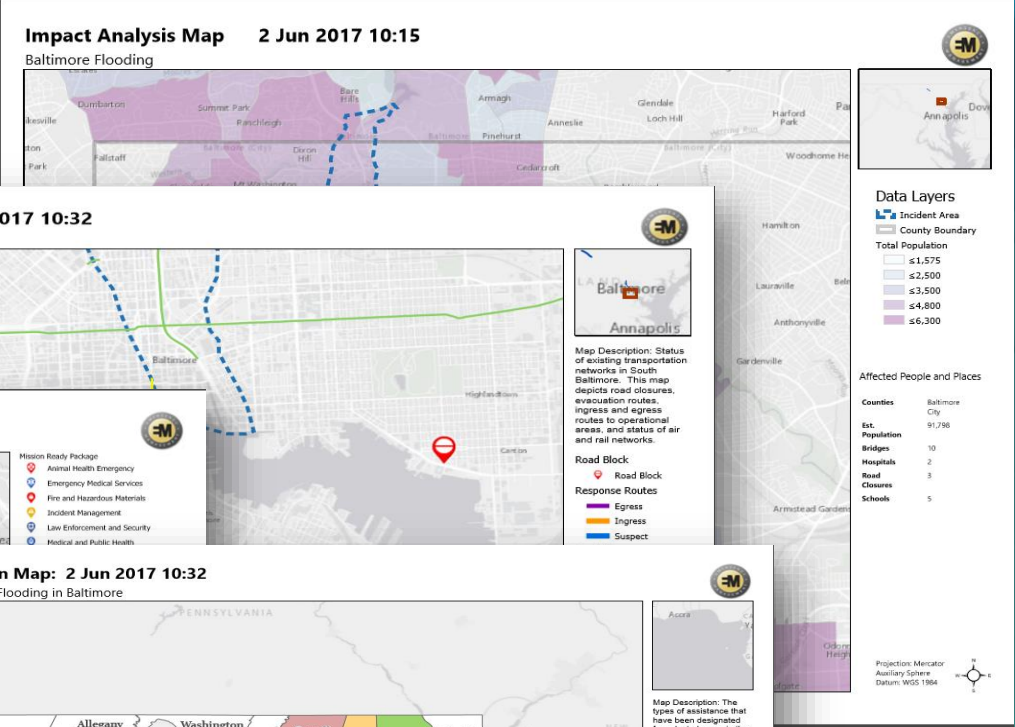
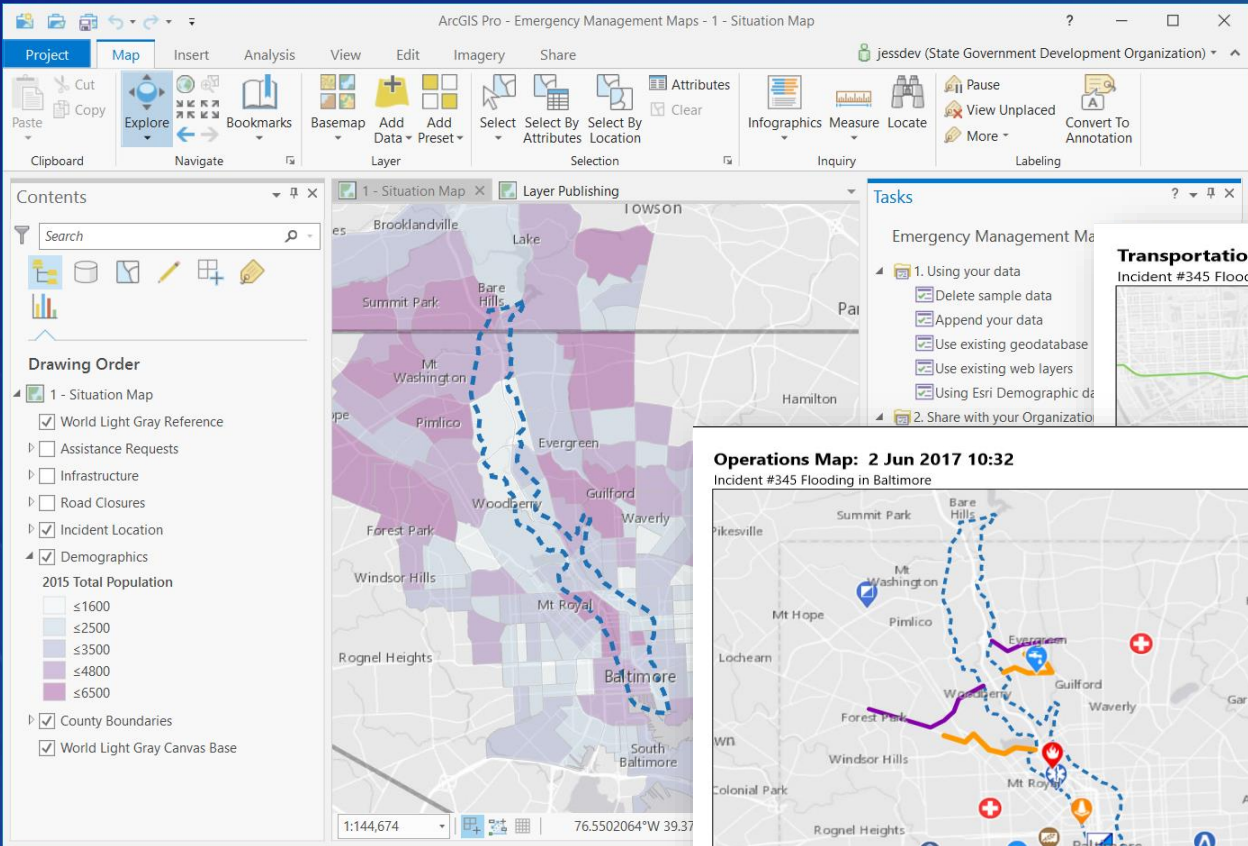
Sharing Workflows

web based, digital, and hardcopy information products

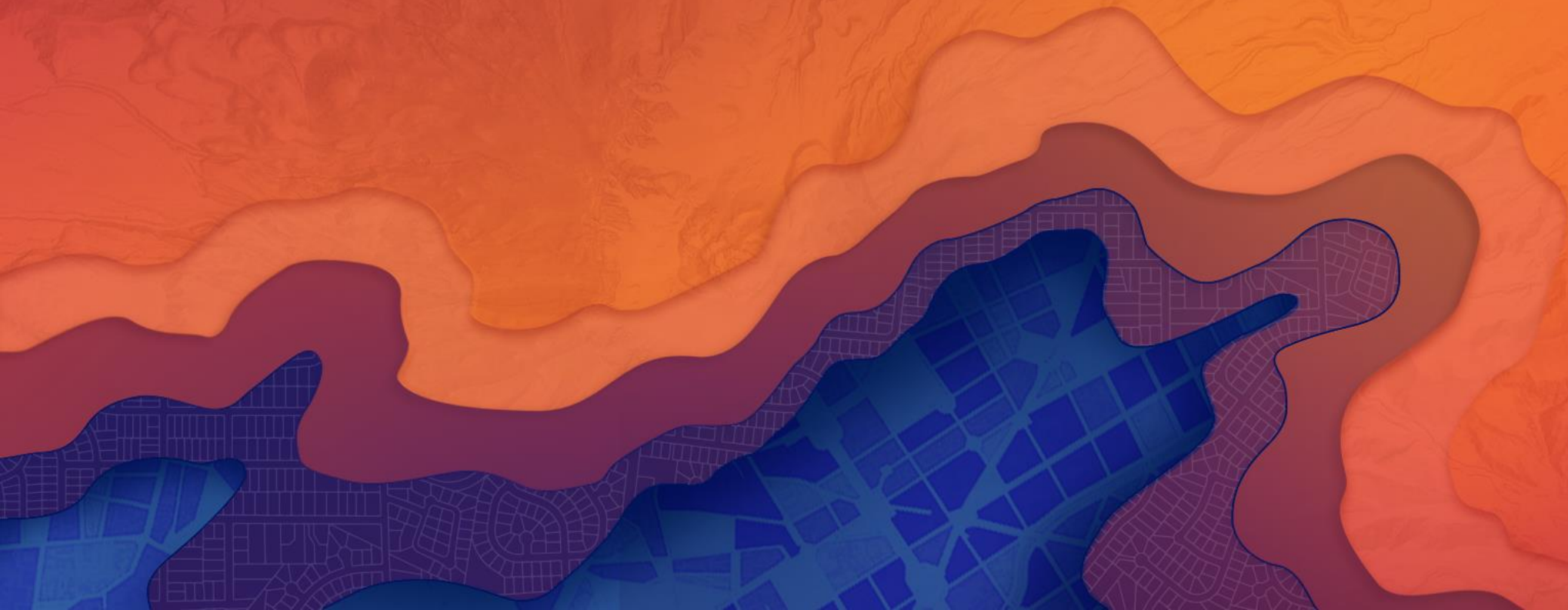
Emergency Management Maps

A foundation for EM solutions

Texas EGRT
Eagle Technologies



Demo

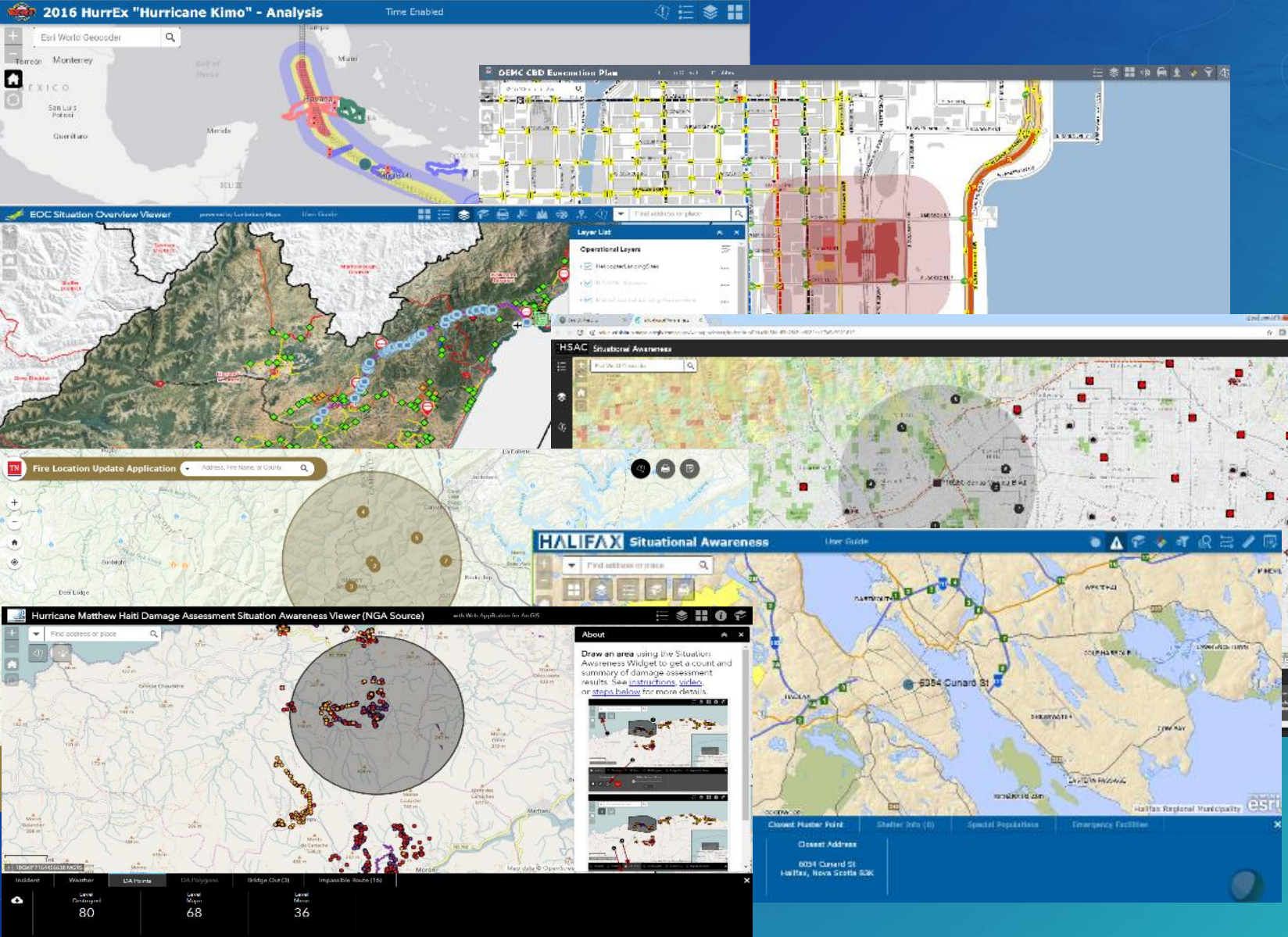


Getting started with EM Maps

esriurl.com/EMgtMaps

1. Download the template
2. Populate with your data
 - Operational data
 - Reference data
 - Esri Data and Maps, Living Atlas, other live feeds
3. Share layers and maps via ...
 - ArcGIS Online organization
 - Printed maps
 - Digital map books
 - ArcGIS Open Data site

... sync workflows targeted for Pro 2.1



Reporting

Snapshots

Layer visibility

Situational Awareness

Demo

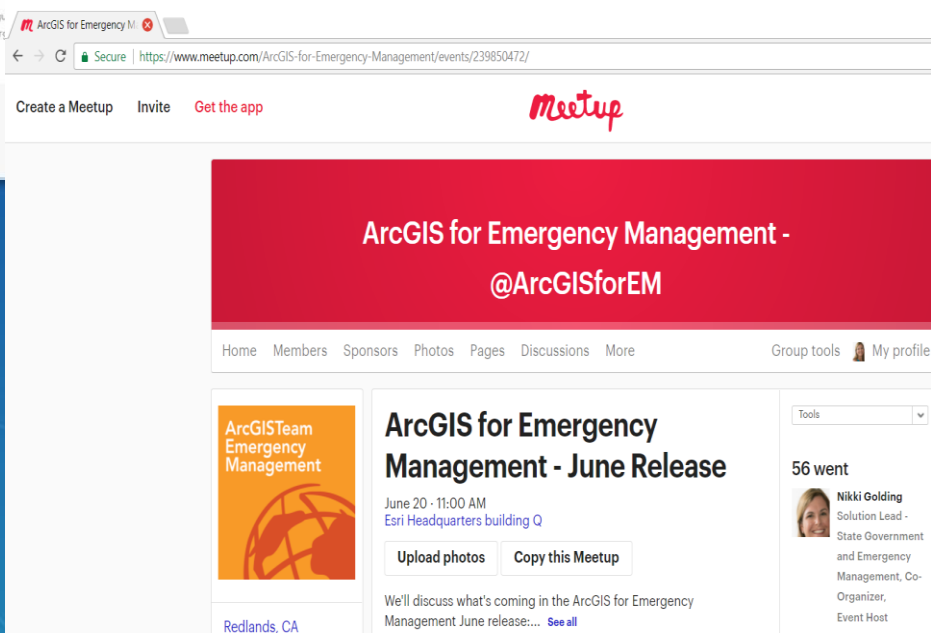
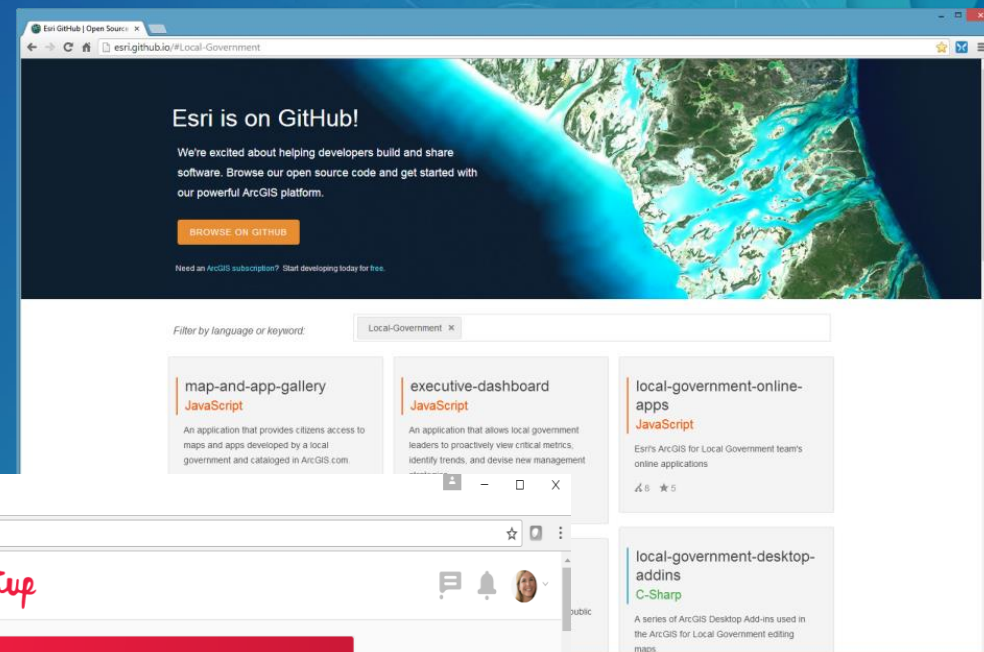
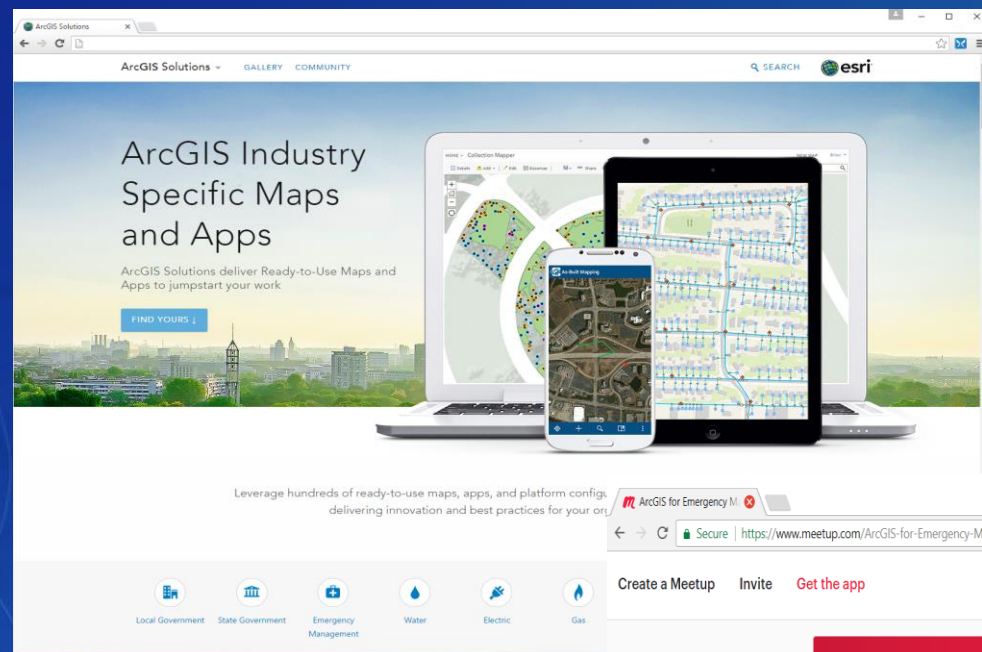


2017 Priorities

- Modernize solutions
 - ArcGISPro, WebApp Builder, 4.x API, Field Workflows
- UC Release
 - Environmental Screening, Transportation 511 updates, Field Workflows, Printing Dijit
- Post UC
 - Executive Dashboard, Environment, Agriculture, Field Workflows, Hub

Join the Community

It's not just about the technology



Closing

- Deliver solutions that enables success
 - Easier to deploy and sustain
- Evolve and grow the collection of apps
- Develop a community of users
- Provide a platform for partners to deploy their solutions

UC Events

- ArcGIS for Emergency Management Sessions
 - Two tech workshops
 - Two demo theatre sessions
- Solution Island
 - Focused conversations / support

The logo consists of the letters 'UC' in a large, bold, white sans-serif font, centered within a dark blue rectangular box.

Esri User Conference

Applying The Science of Where

July 10 - 14, 2017 | San Diego, California

Please Take Our Survey on the Esri Events App!

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Complete Answers and Select "Submit"



Thank you

Be innovative, aware, and know you are not alone

-  <http://solutions.arcgis.com/#Emergency-Management>
-  <https://www.meetup.com/ArcGIS-for-Emergency-Management>
-  [@ArcGISforEM](https://twitter.com/ArcGISforEM)
-  <http://esri.github.com>



esri

THE
SCIENCE
OF
WHERE