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

Knowledge Workers

Executive Access

Public Engagement

Work Anywhere

Enterprise Integration

Making Mapping and GIS Available Across Your Organization

Transforming the Role of GIS
EXTENDING THE PLATFORM WITH SOLUTIONS

Ready to use workflows and apps that make implementation easier and sustainable.
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...
<table>
<thead>
<tr>
<th>Mitigation</th>
<th>Resilience</th>
<th>Preparedness</th>
<th>Response</th>
<th>Recovery</th>
<th>Entire Organization</th>
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<td>Hazard Vulnerability Analysis</td>
<td>Resilience Outreach</td>
<td>Community Events</td>
<td>Impact Summary Map</td>
<td>Photo Survey</td>
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<td>Mitigation Dashboard</td>
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<td>Road Closures</td>
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## 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

### 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

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

Analyze

Communicate

Engage

Educate

Asset Resilience Management

Manage your resilience assets

The dashboard is designed to be used by government officials managing asset resilience.

Additional resilience assets data gathered to inform specifically relating to a hazard or example. This information can be used to assess resilience in relation to that particular hazard.

Lessons Learned

Removal of dead trees

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 accessed alongside hazards and vulnerability data.
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
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
Please Take Our Survey on the Esri Events App!

Download the Esri Events app and find your event

Select the session you attended

Scroll down to find the survey

Complete Answers and Select “Submit”
Thank you
Be innovative, aware, and know you are not alone

https://www.meetup.com/ArcGIS-for-Emergency-Management
@ArcGISforEM
http://esri.github.com