



GIS in Public Works: Real-time, Analytical, Collaborative and Engaged

Mike Dyer and Anthony Myers



Challenges for Public Works Organizations

- **Aging infrastructure**
- **Limited funding for repairs**
- **Rising costs of improvements**
- **Population growth straining existing infrastructure and service delivery**



Public Works organizations are looking for ways to:

- **Better manage public assets**
- **More effectively allocate field resources**
- **Maximize the value of public dollars spent on infrastructure improvements**
- **Increase transparency and quality of service to citizens**



ArcGIS

An Integrated
Web GIS Platform

Providing mapping, analysis, data
management, and collaboration



ArcGIS is a Complete Public Works Location Platform

Location Enablement

Discover, use, make, and share maps at work -- anywhere, anytime

Constituent Engagement

Facilitate and manage communication with stakeholders

Decision Support

Inform execs and management with maps and location intelligence

Field Mobility

Get authoritative information into and out of the field

Analytics

Describe, predict, and improve business performance

Location Data Management

Collect and organize location data about your assets and resources

Map where things are, show how they relate, determine what it all means, and determine what actions to take

Knowledge
Workers



Executive
Access



Public
Engagement



Work
Anywhere



Enterprise
Integration



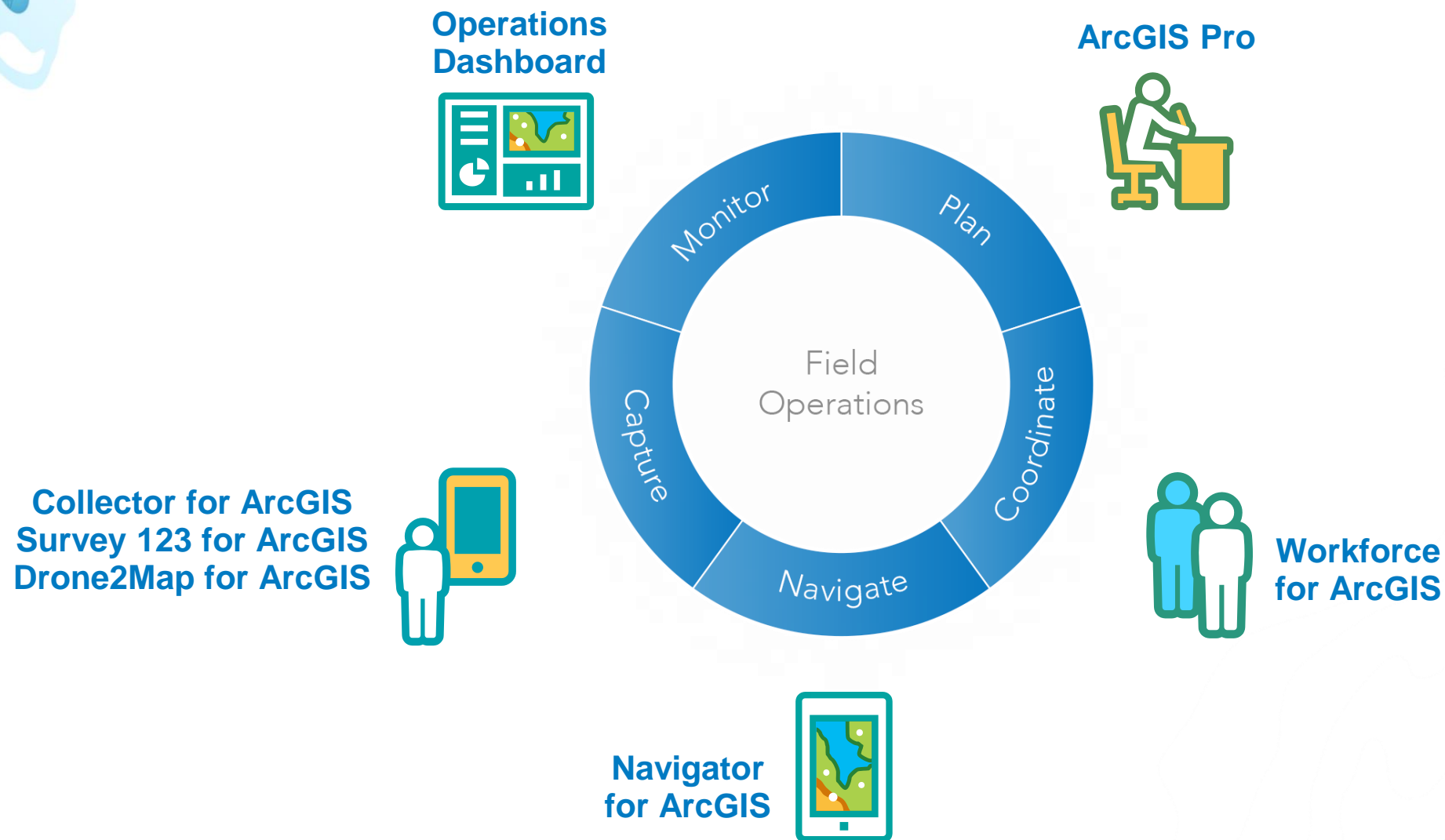
ArcGIS

Web GIS



DEMONSTRATION 1

ArcGIS Apps for the Field





Apps for Everyone

ArcGIS apps get the job done through their sheer focus, geographic awareness, and readiness to work. They are powered by the industry-leading ArcGIS mapping platform.

[Try ArcGIS](#)

<http://www.esri.com/apps>

See what ArcGIS Apps are available



Apps for the Field

Take GIS to the Field and Back



Apps for the Office

Make Better Decisions with Geographic Insights



Apps for the Community

Engage Your Audience



App Builders

Build Your Own Apps, No Coding Required

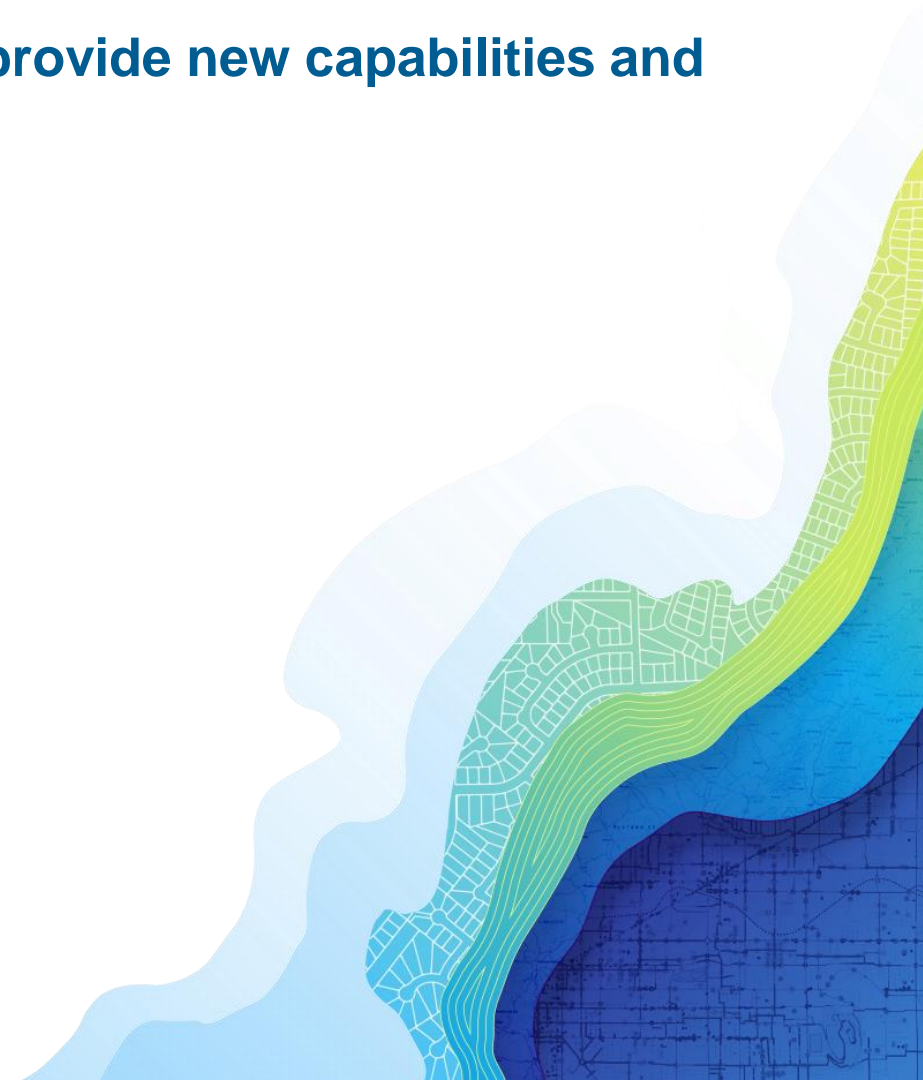


DEMONSTRATION 2



Key Takeaways

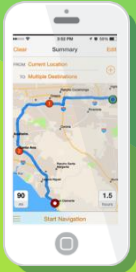
- **Apps are a key component of the ArcGIS Platform and provide new capabilities and opportunities for public works.**



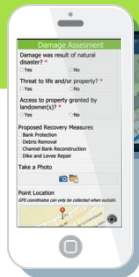
Apps

Field

Navigator



Workforce



Survey123



Collector

Mobile

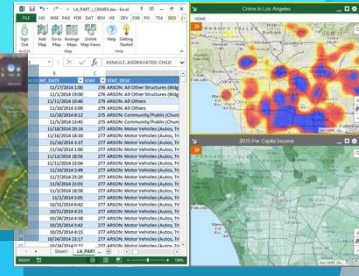
(Connected & Disconnected)

Office

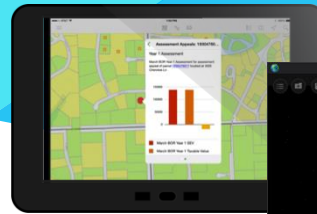
ArcGIS for AutoCAD



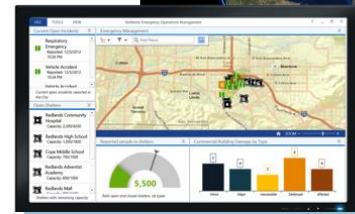
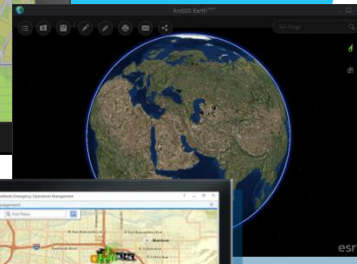
Maps for Office



Explorer



ArcGIS Earth



Dashboard

Public

Open Data



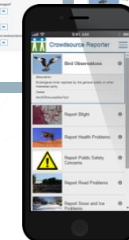
Story Maps



Photo Survey

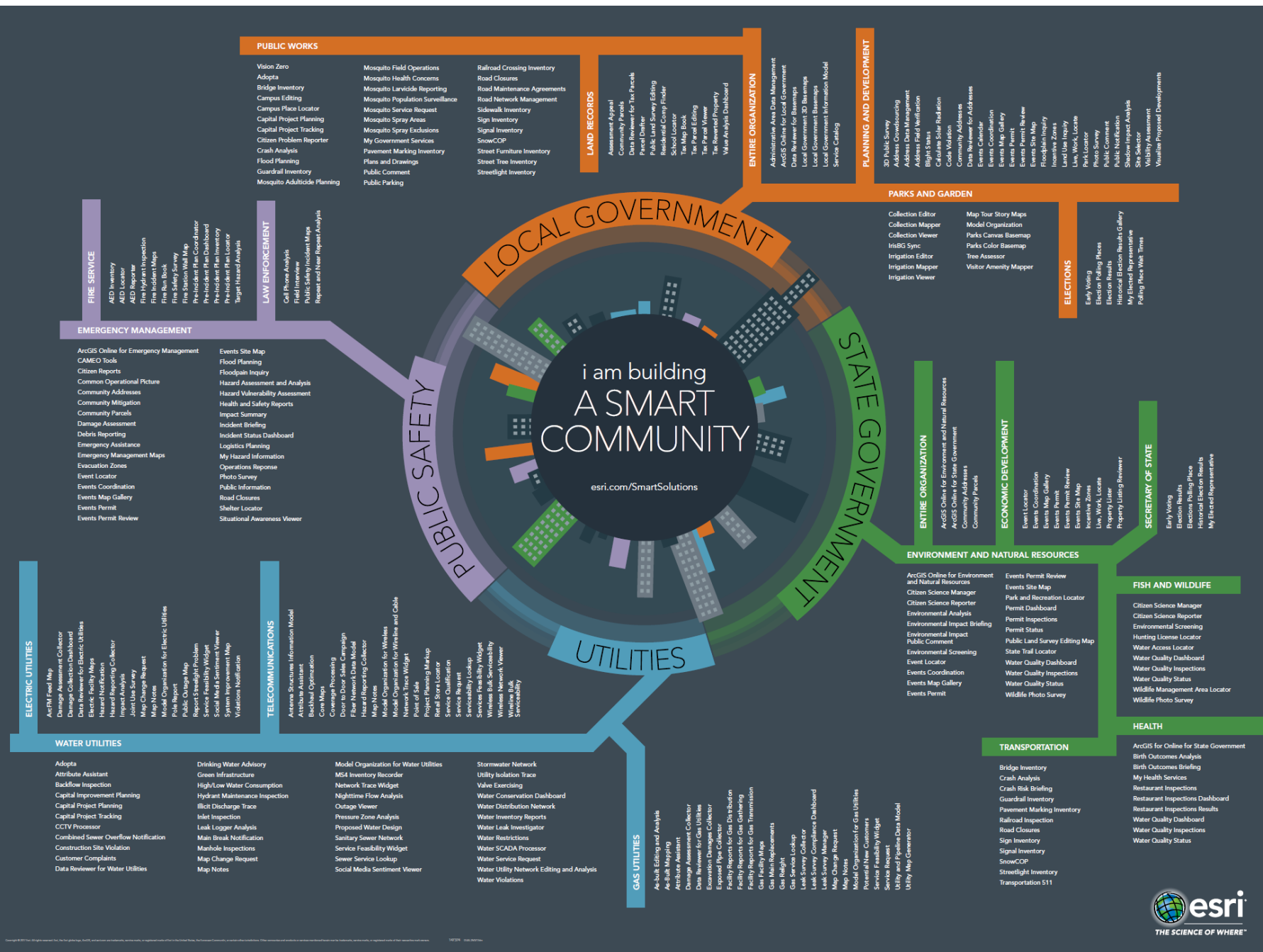


Crowdsourcing



Configurable Solutions That Work Together

Easy, Focused, and Ready-to-Use



ArcGIS Solutions for Public Works



Maintain Public Road Network

- Maintain Public Road Network
- Track Maintenance Agreements
- Index Plans and Drawings
- Inventory Administrative Areas



Traffic Engineering

- Crash Analysis
- Vision Zero
- Road Closures



Parks and Grounds

- Park Locator
- Inventory Building Information
- Locate Places on Campus



Solid Waste and Sanitation

- Manage Snow Operations
- Leaf Collection



Mosquito Control

- Report Mosquito Activity
- Request Spray Exclusion
- Locate Mosquito Spray Areas
- Conduct Field Operations
- Suppress Adult Mosquitos
- Control Juvenile Mosquitos
- Monitor Mosquito Populations
- Track Vector-Borne Diseases



Inventory Right of Way Assets

- Street Sign Inventory
- Traffic Signal Inventory
- Streetlight Inventory
- Street Trees Inventory
- Bridge Inventory
- Sidewalk Inventory
- Street Furniture Inventory
- Pavement Markings Inventory



- Capital Project Planning
- Capital Project Tracking



Parking

- Promote Public Parking



Citizen Engagement

- My Government Services
- Adopta
- Citizen Problem Reporter
- Public Comment



- Flood Planning

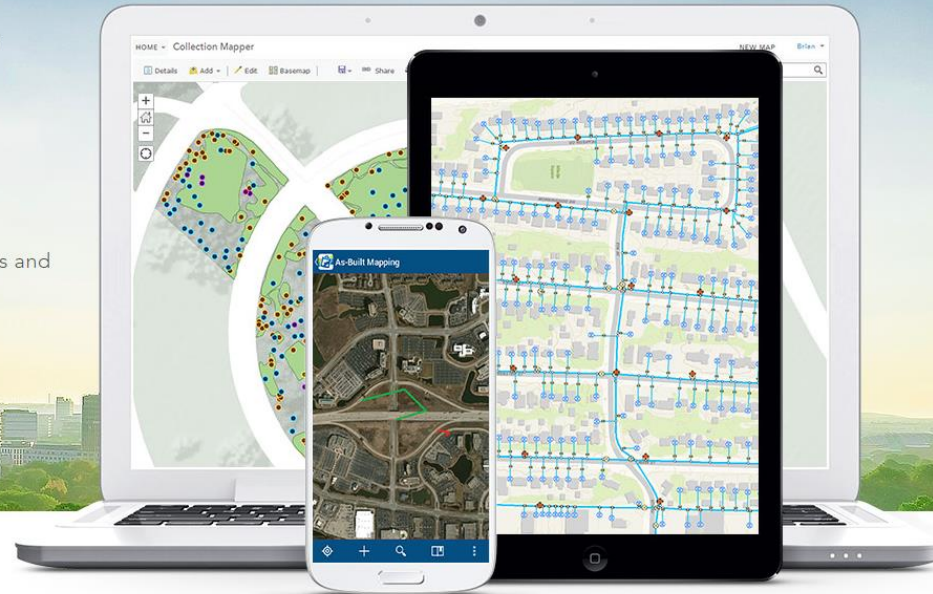


- Events Permitting
- Events Site Map
- Event Coordination
- Events Permit Review
- Event Communication

ArcGIS Industry Specific Maps and Apps

ArcGIS Solutions deliver Ready-to-Use Maps and Apps to jumpstart your work

FIND YOURS ↓

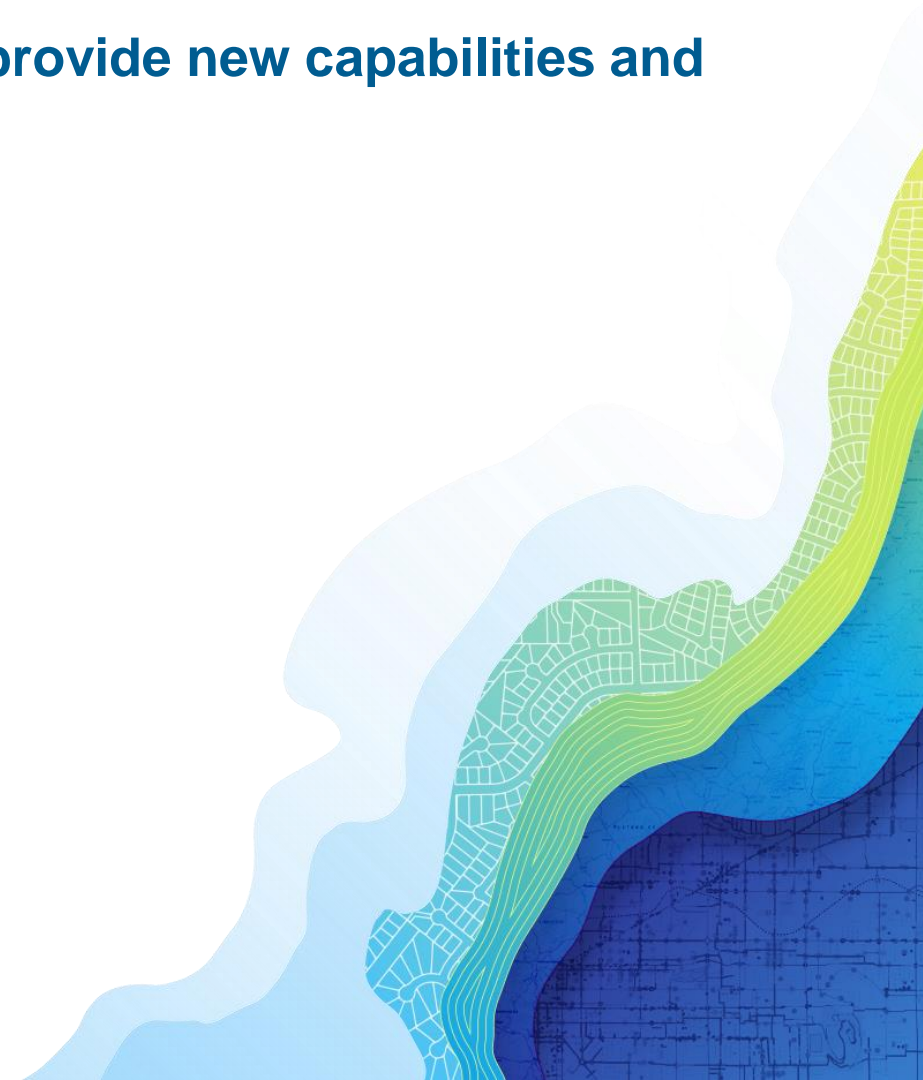


Leverage hundreds of ready-to-use maps, apps, and platform configurations to meet your needs, delivering innovation and best practices for your organization.

solutions.arcgis.com

Key Takeaways

- **Apps are a key component of the ArcGIS Platform and provide new capabilities and opportunities for public works.**
- **ArcGIS Pro simplifies the process of deploying apps.**



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- **Esri partnership with Waze Connected Citizen Program engages your customers in a meaningful way and delivers valuable real-time data to your organization in return.**



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- **Apps are a key component of the ArcGIS Platform and provide new capabilities and opportunities for public works.**
- **ArcGIS Pro simplifies the process of deploying apps.**
- **Esri partnership with Waze Connected Citizen Program engages your customers in a meaningful way and delivers valuable real-time data to your organization in return.**
- **Insights for ArcGIS provides simple but powerful analytics capabilities for public works organizations.**



Let's continue the conversation

- **Public Works - Esri Showcase**
- **Public Works Special Interest Group**
- **Public Works Maps and Apps for Local Government**

Tuesday 9-6, Wednesday 9-6, Thursday 9-1:30

Wednesday 12:00 -1:00pm, Room **24B**

Wednesday 3:15 – 4:30, Room **?**

Moderated Paper Presentations

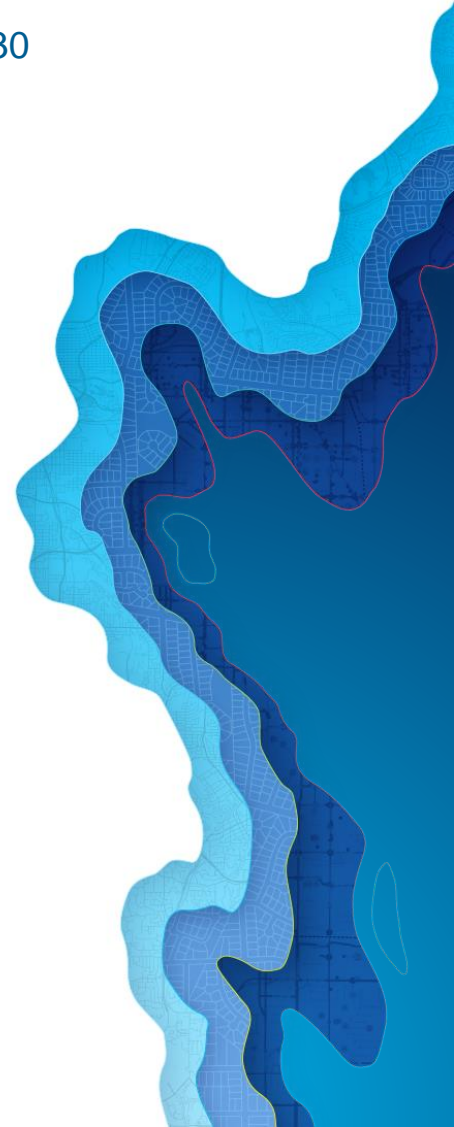
- **Modern Public Works**
- **The Perfect Match: Public Works and Mobile**
- **Public Works Simplified: GIS Applications for Public Works**
- **State and Local Government Social**

Tuesday 1:30-2:45, Room **?**

Wednesday 3:15 – 4:30, Room **?**

Thursday 1:30-2:45, Room **16A**

Wednesday 5:30 – 7:30, ?





esri

**THE
SCIENCE
OF
WHERE**