ArcGIS Solutions for Infrastructure

Mike Dagle

Scott Oppmann

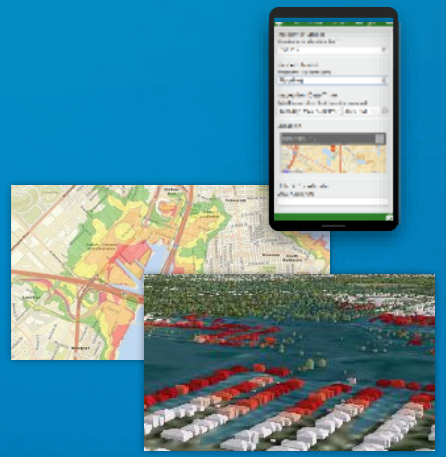
Esri Southeast User Conference

ArcGIS Solutions Ready-to-Use Apps for Specific Industries

Preconfigured

Tools
Data Models
Apps
Workflows
Maps
Add-Ins
Initiatives
Dashboards

Local & State Governments



Emergency Management & Public Safety

Industry Configurations

- Land Records
- Public Works
- Emergency Management
- Utilities / Network Management
- Planning and Development
- Natural Resources
- Transportation
- Defense
- Public Safety
- Telecommunications
- Conservation
- Elections
- Health / Human Services

- Extensive (150+)
- Easy to Deploy
- Fully Supported
- Included with ArcGIS

Health & Human Services

Utilities & Telecoms

Defense & Security

. . . Helping Users Quickly Realize Value

ArcGIS Solutions

Mission

- Solve common business needs
  - Integrated workflows, focused maps and apps…..
- Drive implementation of ArcGIS
  - Roadmap for standard capabilities, improve service delivery, expand reach, innovation….
- Promote modern deployment patterns
  - Leverage new ArcGIS offerings, maximize available resources, focus on complex or unique problems….
- Provide feedback to core software development
- Work collaboratively with community
  - Best practices, industry tradecraft….

America's Aging Infrastructure: What to Fix, and Who Will Pay?
The Billion Dollar Crisis in Outdated Government Technology
US RANKS 13TH IN INFRASTRUCTURE QUALITY
Nov 12, 2019
Minnesota I-35 Bridge Collapse Anniversary: How Safe Are Drivers Now?
Senate Passes $1 Trillion Infrastructure Bill, Handing Biden a Bipartisan Win
Cities
NATIONAL
Potholes, Grid Failures, Aging Tunnels And Bridges: Infrastructure Gets A C-Minus
Revitalizing Urban Neighborhoods: Building Blocks for the Future of America's Cities
The 'Silver Tsunami' Has Arrived in Government

Helping Organizations

Public and private agencies that manage underground and visible assets

- Create authoritative asset inventories
- Understand asset condition
- Coordinate capital improvements and expenditures
- Inform and engage the public

Current ArcGIS Solution Portfolio

Asset Inventory

- Communications Data Management
- District Energy Data Management
- Electric Data Management
- Gas Data Management
- Park Infrastructure Management
- Plans and Drawings
- Public Parking
- Road Network Data Management
- ROW Asset Inventory
- Sewer Data Management
- Stormwater Data Management
- Water Distribution Data Management

Asset Condition

- CCTV Manager
- Dam Safety
- Electric Underground Inspections
- Fire Hydrant Inspection
- Lead Service Line Inventory
- Road Closures
- Traffic Crash Analysis
- Transit Safety
- Tree Management
- Winter Weather Operations

Coordinate Improvements

- Capital Project Planning
- Capital Project Tracking
- Environmental Analysis
- Participatory Budgeting
- Social Equity Analysis
- ROW Permitting

Inform & Engage Public

- Adopt-A-Catch Basin
- Adopt-A-Stop
- Citizen Problem Reporter
- Performance Management
- Transit Outreach
- Vision Zero
- Winter Weather Outreach

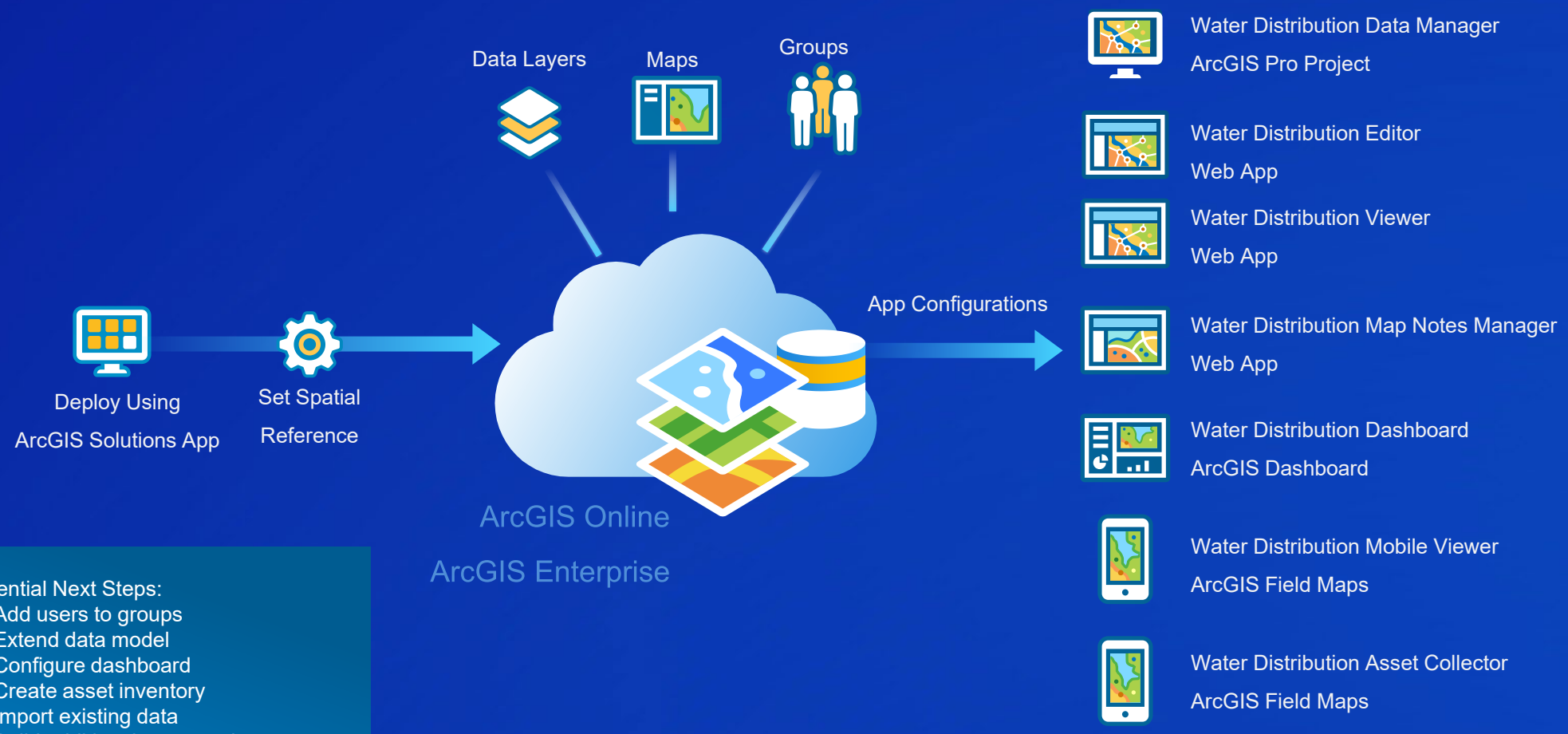
Infrastructure Solutions

Let’s dig in

Managing Utility Asset Information

	Data Management Solutions	Utility Network Foundations
ArcGIS Environment	ArcGIS Online or ArcGIS Enterprise (Data Store)	ArcGIS Enterprise
Deployment	Instant	Streamlined Process
Data Representation	Simple Features	Utility Network
Data Model	Typical Industry Assets and Attributes	Typical Industry Assets, Attributes, Attribute Rules, Terminal Configurations, Network Attributes, Network Rules, Tiers
Extendibility	Medium	High
Customizable	Low	High
Localization	Difficult	Easy
Skill Level to Deploy	Low	High
Ideal Customers	Small, Simple, Have no GIS data, Just want map, want a separate publication or sharing environment, AEC firms	Large, Sophisticated, Modern, Enterprise, Digital Twin
Utility Systems	Communications, District Energy, Electric, Gas, Sewer, Stormwater, Water Distribution	

Deploying Data Management



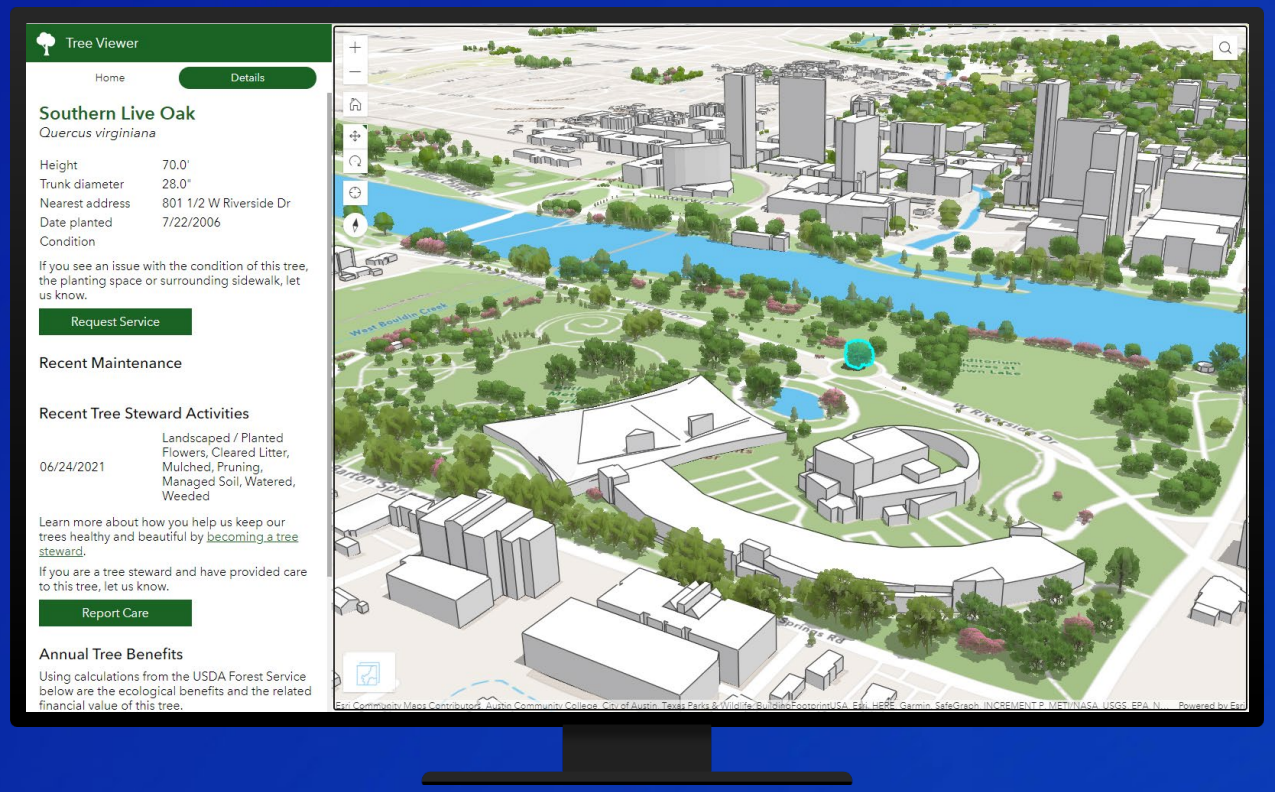
Potential Next Steps:

- Add users to groups
- Extend data model
- Configure dashboard
- Create asset inventory
- Import existing data
- Build additional maps and apps

Deploying Utility Network Foundation

Potential Next Steps:

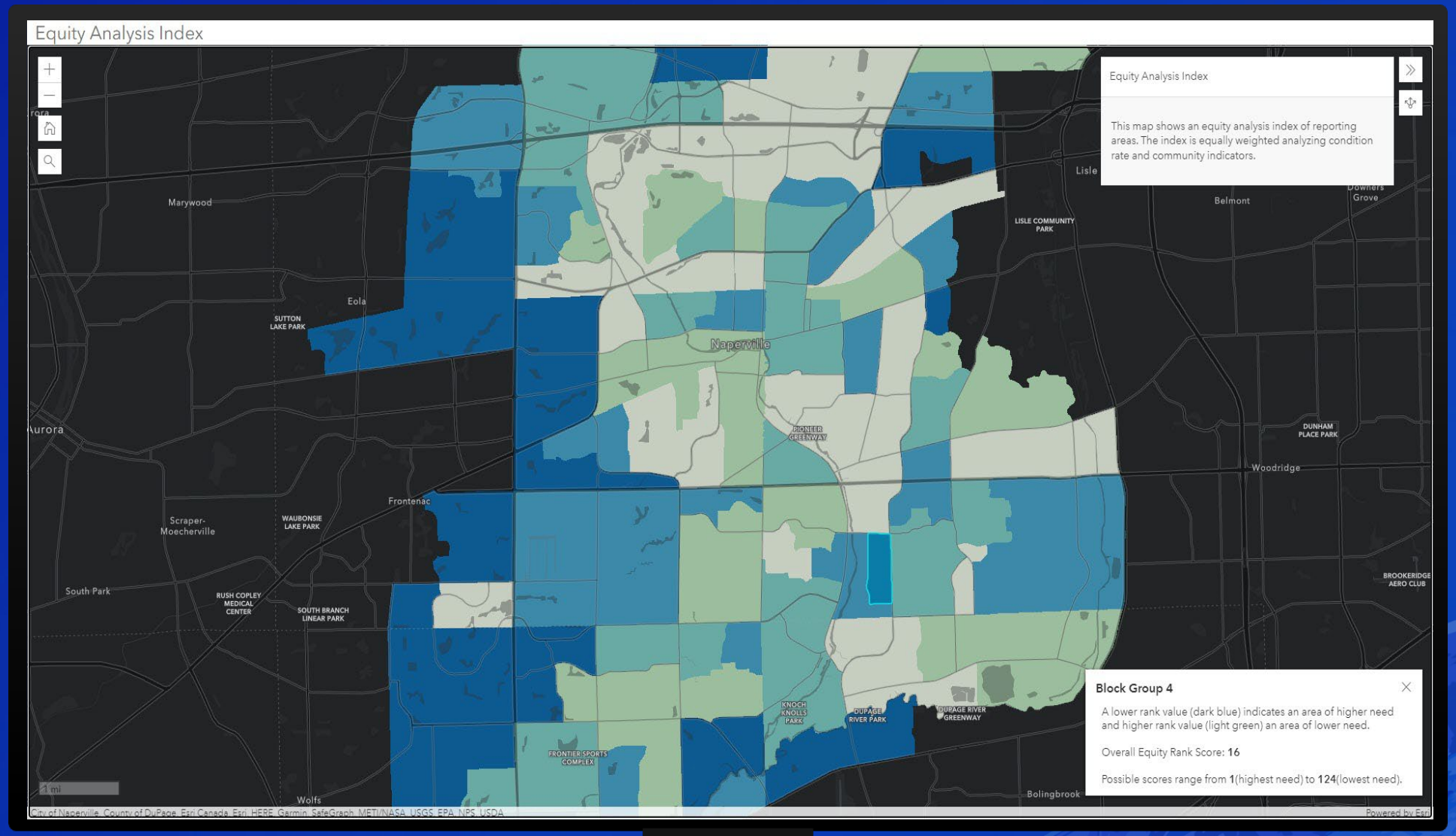
- Import existing data
- Establish organizational data management workflows
- Create asset inventory
- Create additional apps powered by utility network services



Show Me!

Capital Project Planning / Tracking
Citizen Problem Reporter

Social Equity Analysis



ArcGIS Solutions Roadmap

Last update: January 2022

Near-term

- Adopt-a-Catch Basin (Update)
- Broadband Outreach
- Citizen Problem Reporter (Update)
- Civil Support
- Combined Sewer UN Foundation
- Dam Safety (Update)
- Economic Development
- Electric Overhead Inspections
- Elections Management (Update)
- Election Outreach (Update)
- Election Results (Update)
- Fire Accreditation
- Hydrant Inspections
- My Trash Services (Update)
- Network Path Planner (Update)
- Operations / Readiness Management (Update)
- Park Infrastructure Management (Update)
- Pipeline Referencing Foundation
- Pre-Incident Planning (Update)
- Sewer Manhole Inspections
- Weather Operational Effects

Mid-term

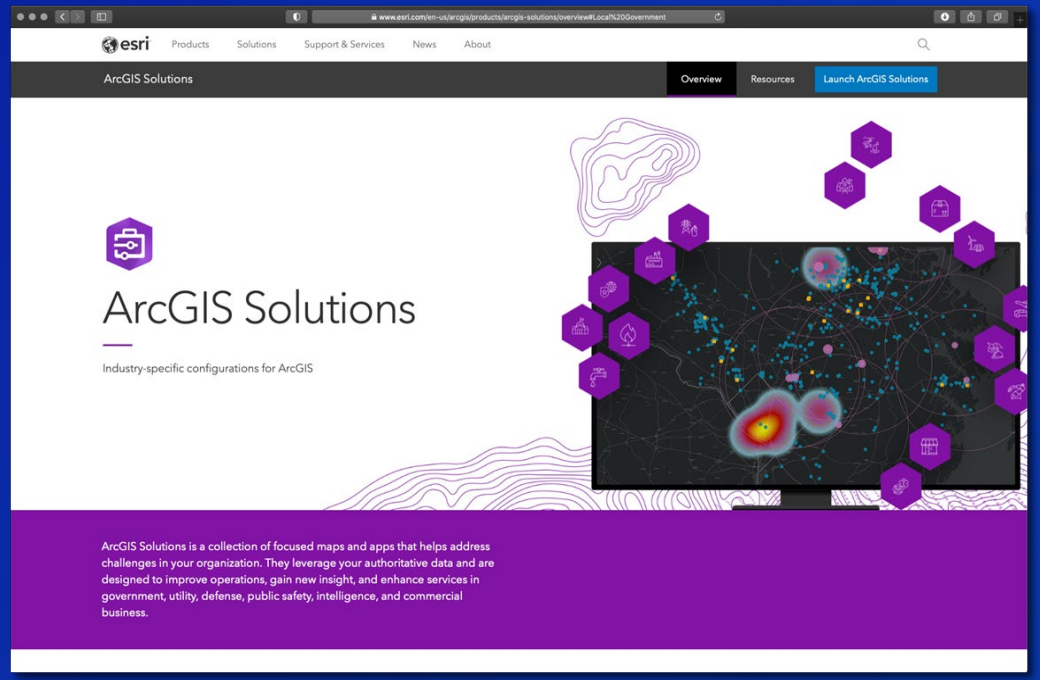
- Abandoned Well Management
- Combined Sewer Data Management
- Community Risk Reduction
- Conservation Easement Monitoring (Update)
- Crime Analysis (Update)
- Crime Reduction Operations
- Curb Management
- Environmental Analysis
- Equitable Property Value (Update)
- EV Charging Sites / Infrastructure
- Gridded Reference Graphic
- Hazard Mitigation and Resilience
- Joint Use Survey
- Military Aspects of Terrain
- Protection Operations (Update)
- Sidewalk Management
- Water Distribution UN Trace
- Water Distribution Valve Inspections
- Water Utility Outreach

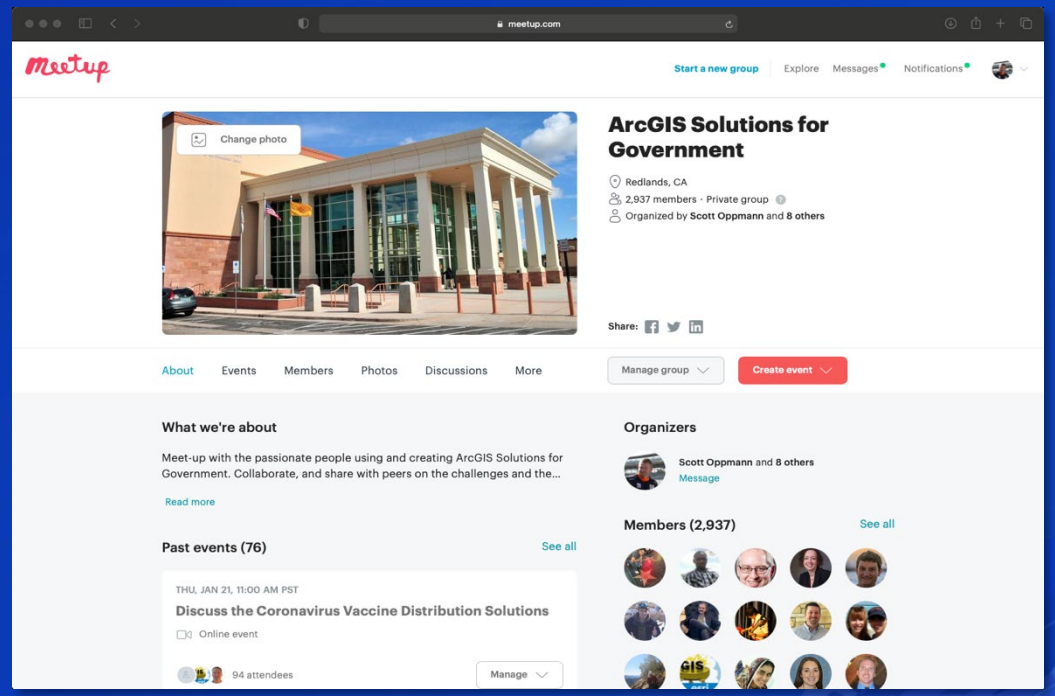
Long-term

- Affordable Housing
- Capital Project Planning / Tracking (Update)
- Electric UN Foundation
- Emergency Management Operations
- Fat, Oil, and Grease Management
- Flood Impact Analysis (Update)
- Forest Inventory
- Gas Leak Survey
- Military Decision-Making Process
- Military Training Center Management
- Military (Land, Air, Maritime) Operations
- My Neighborhood
- Recreation Outreach (Update)
- Roadway Management
- ROW / Encumbrance Data Management
- Sign / Signal Management
- Stormwater Catch Basin Inspections
- Utility As-Builting
- Water Distribution Backflow Inspections
- Wildlife Monitoring

The Community

It's not just about the technology





Key Takeaways

- ArcGIS includes a rich set of solutions you can leverage with infrastructure agencies
- Help agencies address common business needs
- Promote modern deployment patterns and leverage ArcGIS capabilities
- Developed collaboratively with community
- Deploying ArcGIS Solutions has never been easier

Thank you

Be innovative, aware, and know you are not alone

Scott Oppmann, Manager
ArcGIS Solutions

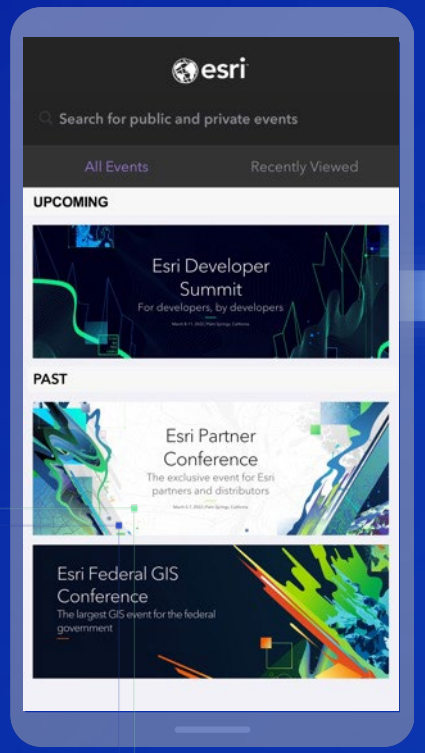
Mike Dagle, Product Engineer
Infrastructure Solutions

http://solutions.arcgis.com/

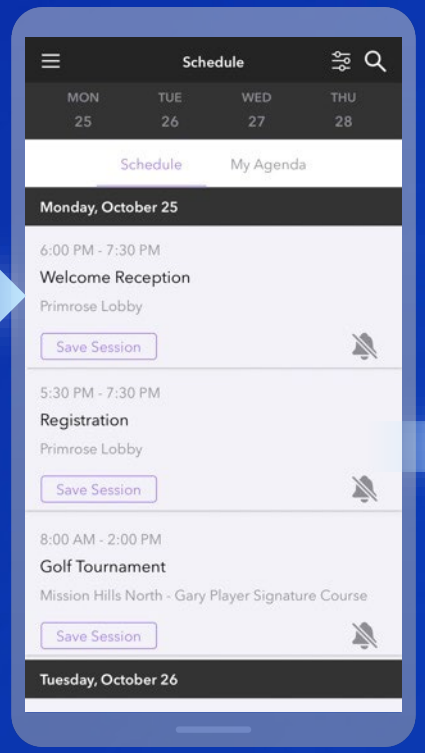
http://meetup.com/ArcGIS-for-Government/

Please Share Your Feedback in the App

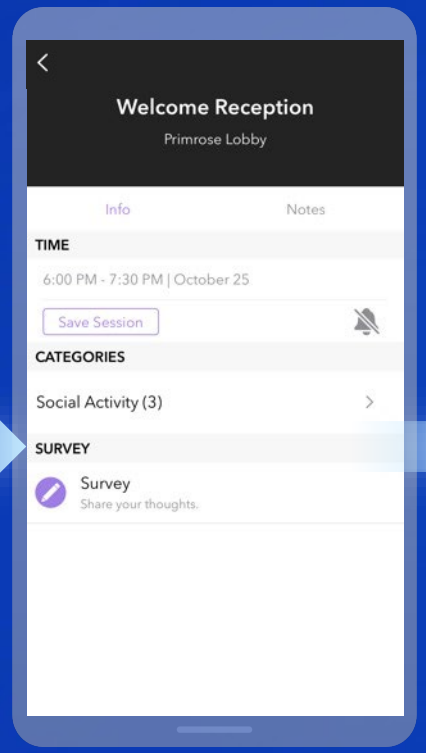
Download the Esri Events app and find your event



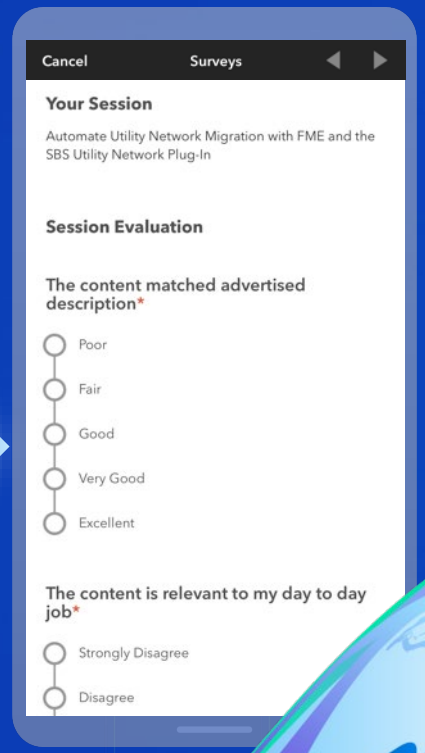
Select the session you attended



Scroll down to "Survey"



Log in to access the survey



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