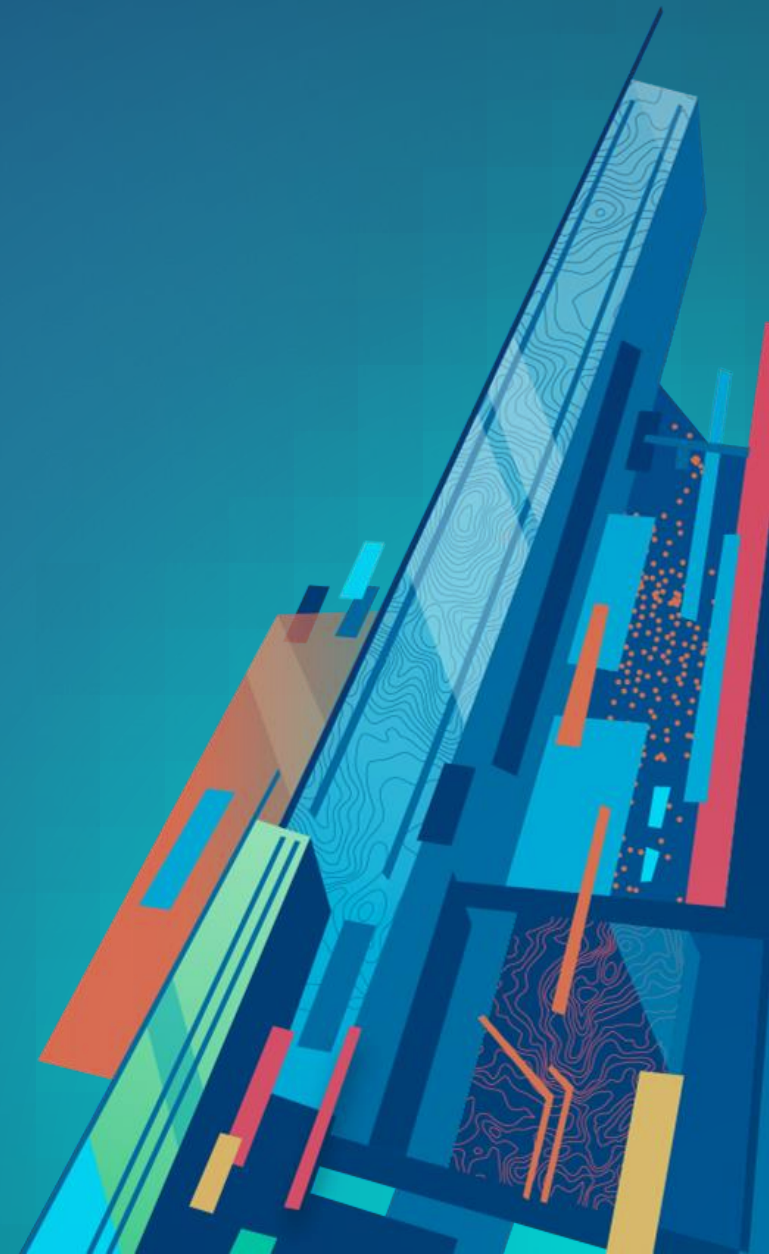




# Public Works Maps and Apps for Local Government

Lindsay Thomas

Scott Oppmann



# Public Works

## Overview

- The functions of a Public Works Department vary from one organization to another
- Some manage visible assets, others manage underground assets, mix of both, etc.
- In many cases, public works must also handle:
  - Solid Waste / Sanitation
  - Fleet
  - Buildings and Grounds
  - Parks

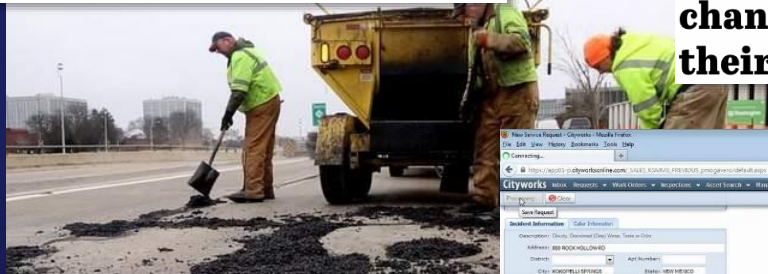


# Today's Public Works Business Requirements

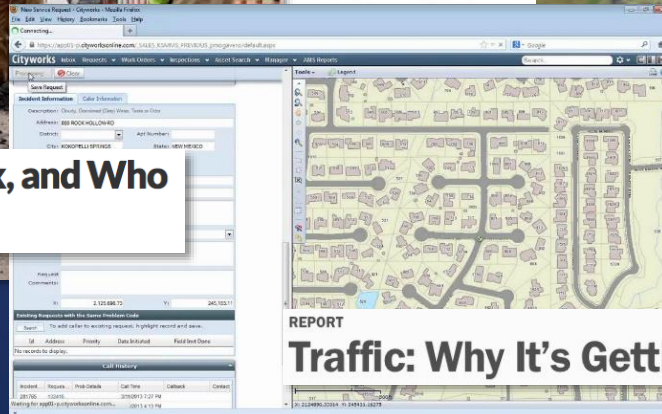
Expectations and business requirements have changed

- Historically, CAD and “paper” used to support maintenance and construction
- But, today's business environment have changed these requirements.....

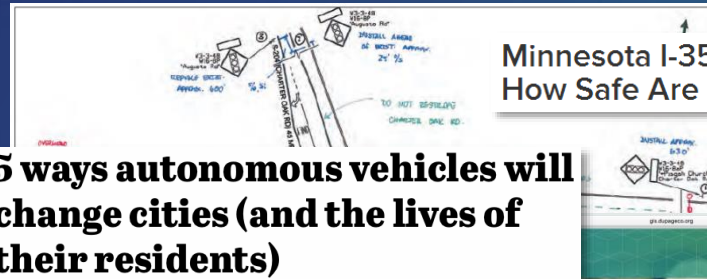
**L.A.'s New Mobility Plan Envisions a Different Kind of City**



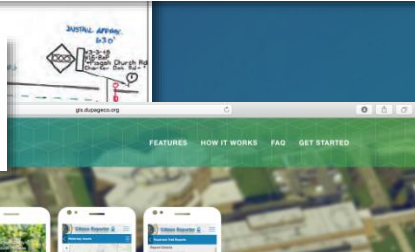
**America's Aging Infrastructure: What to Fix, and Who Will Pay?**



**5 ways autonomous vehicles will change cities (and the lives of their residents)**

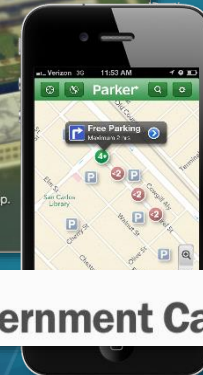


**Minnesota I-35 Bridge Collapse Anniversary: How Safe Are Drivers Now?**



**Welcome to Citizen Reporter**

You report, we respond.  
Use this Guide to learn more about DuPage County's Citizen Reporter app.  
[Learn more](#)



**Traffic: Why It's Getting Worse, What Government Can Do**

# GIS Has Evolved

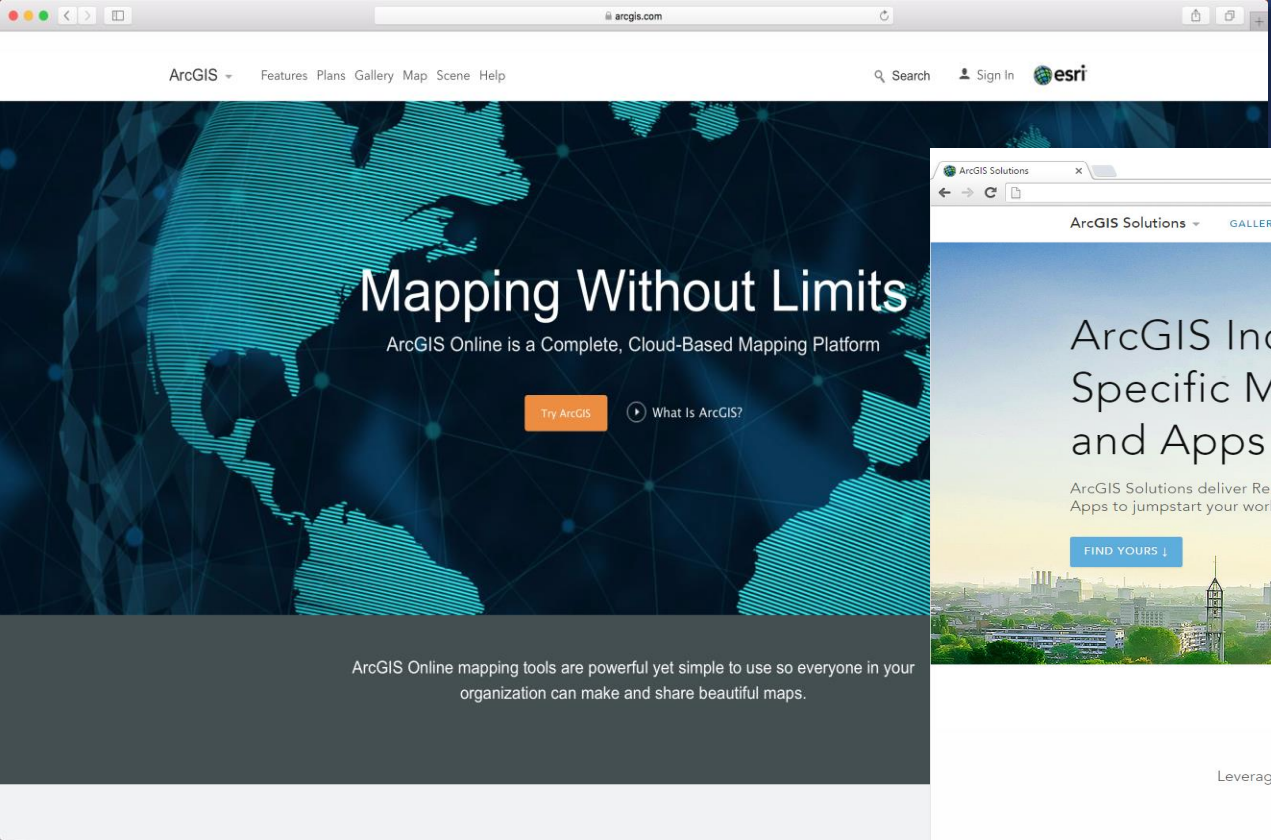
Your GIS is an Interconnected Platform



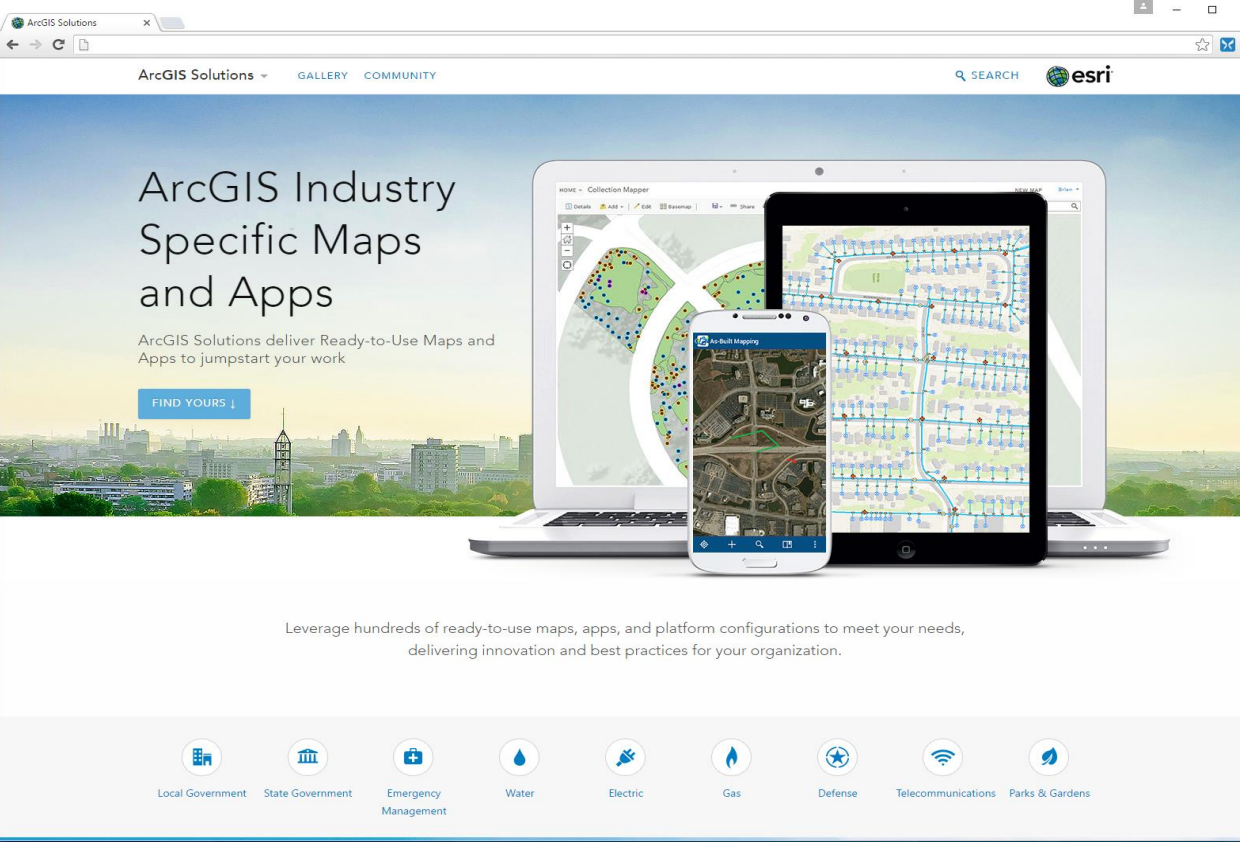
*Bringing Together Data, Technology, and People . . .*

*. . . Creating a Framework for Solving Complex Problems*

# Turning Point



ArcGIS Online

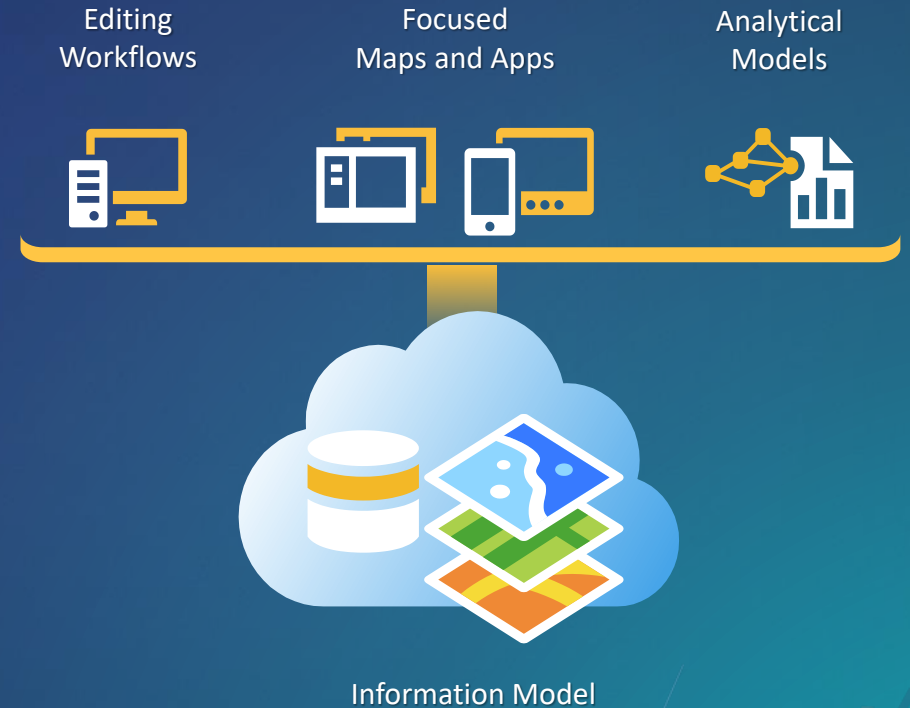


ArcGIS Solutions

# ArcGIS Solutions for Local Government

Improving local government operations and enhancing services provided to the public

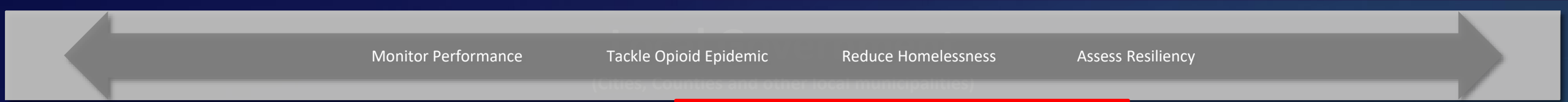
- Collection of useful maps and apps
  - Configurable and extensible
  - Freely available and fully supported
- Community of users (2000+ Meetup members)
  - Best Practices / Implementation Support
- Network of Esri Services and Partner offerings
  - Help users implement, sustain and enhance



.....Available on-premise or in the cloud

# Mission

- Deliver maps and applications quickly throughout their organization
  - Roadmap for standard capabilities, improve service delivery, expand reach, innovation....
- Stay current with future releases / avoid legacy technology
  - Save time and money, leverage new ArcGIS offerings, focus on complex or unique problems....
- Unlock geospatial platform so it can be leveraged by many
  - Mitigate many organizational challenges, maximize technical expertise....
- Leverage the collective knowledge of the entire community
  - Best practices, industry tradecraft....



Monitor Performance

Tackle Opioid Epidemic

Reduce Homelessness

Assess Resiliency

(Cities, Counties and other local municipalities)

**Elections**

<b>Share Election Results</b>
Early Voting
Election Polling Places
Polling Wait Times
Election Results
Historical Election Results Gallery
My Elected Representative

**Land Records**

<b>Manage Assessment Roll</b>
<b>Determine Property Value</b>
<b>Respond to Appeals</b>
<b>Inform Public</b>
Tax Map Book
Community Parcels
<b>Determine Property Value</b>
Value Analysis Dashboard
Tax Reverted Properties
<b>Respond to Appeals</b>
Property Tax Assessment Appeal
<b>Inform the Public</b>
Tax Parcel Viewer
My Tax Distribution
School Locator
Residential Comp Finder

**Public Health**

<b>Tackle Opioid Epidemic</b>
<b>Reduce Homelessness</b>
Naloxone Deployment Reporter
Drug Activity Reporter
Drug Drop-off Locator
Drug Drop-off Calculator
Health Resource Inventory
Opioid Treatment Locator
Pain Management Locator
Opioid Response Dashboard
<b>Reduce Homelessness</b>
Homeless Point-in-Time Counts
Homeless Service Locator
Homeless Activity Reporter

**Law Enforcement**

<b>Organize Foundational Data</b>
<b>Perform Crime Analysis</b>
<b>Develop Tactical Plans</b>
<b>Inform the Public</b>
Near Repeat Analysis
<b>Develop Tactical Plans</b>
Tactical Operation Planner
Tactical Operation Dashboard
Tactical Operation Surveillance
<b>Inform the Public</b>
Public Crime Map
Neighborhood Crime Reports

**Fire Service**

<b>Improve Fire Operations</b>
<b>Develop Pre-Incident Plans</b>
<b>Increase Fire Prevention</b>
<b>Respond to Emergencies</b>
AED Locator
AED Inventory
<b>Develop Pre-Incident Plans</b>
Target Hazard Analysis
Pre-Incident Plan Coordinator
Pre-Incident Plan Field Inventory
Pre-Incident Plan Dashboard
Pre-Incident Plan Locator
<b>Increase Fire Prevention</b>
Fire Safety Survey
<b>Respond to Emergencies</b>
Emergency Assistance
Warming/Cooling Center Locator
Warming/Cooling Center Reporter

**Public Works**

<b>Maintain Public Road Network</b>
<b>Promote Public Parking</b>
<b>Reduce Traffic Fatalities</b>
<b>Engage the Public</b>
<b>Respond to Emergencies</b>
<b>Maximize Capital Investments</b>
<b>Reduce Traffic Fatalities</b>
Crash Analysis
Crash Risk Briefing
High Injury Network Locator
Vision Zero
Fatal and Serious Crash Dashboard
<b>Engage the Public</b>
Citizen Problem Reporter
My Trash Services
Adopta
<b>Respond to Emergencies</b>
Flood Planning
SnowCOP
<b>Maximize Capital Investments</b>
Capital Improvement Plan
Capital Project Dashboard
Capital Project Locator
Capital Project Plans
Capital Project Reports
Capital Project Review
External Agency Projects
Pavement Moratoriums
Participatory Budgeting

**Planning and Development**

<b>Manage Address Information</b>
<b>Promote Vibrant Communities</b>
<b>Manage Community Events</b>
<b>Visualize Proposed Developments</b>
Address Crowdsourcing
Administrative Area Data Management
<b>Promote Vibrant Communities</b>
Site Selector
Incentive Zones
My Neighborhood Services
<b>Manage Community Events</b>
Events Calendar
Events Permit
Events Permit Review
Events Site Map
Events Coordination
Events Map Gallery
<b>Visualize Proposed Developments</b>
Local Government 3D Scenes
3D Public Survey
Visualize Proposed Developments
Visibility Assessment
Calculate Solar Radiation
Shadow Impact Analysis

**Encourage Orderly Growth**

<b>Stabilize Neighborhoods</b>
<b>Engage Public</b>
<b>Stabilize Neighborhoods</b>
Property Condition Survey
Neighborhood Early Warning
Blight Status
Demolition Tracker
Mortgage Counseling Locator
Code Violation
<b>Engage Public</b>
Construction Activity Tracker
Park Locator
Public Comment
Public Notification
Photo Survey

**Entire Organization**

<b>Performance Management</b>
Performance Management



# Our Goals

Expand the use of location-based data in public works organizations

- Develop focused maps and apps that address key workflows in:
  - Engineering
  - Operations
  - Environmental Services
- Modernize public engagement for public works organizations
- Leverage ArcGIS Online as a platform for public works information and workflows
- Organize a community of users to guide the solution offerings
  - Started with City of Tampa, FL
  - Evolving with City of Austin, TX

ArcGIS Solutions

ArcGIS Solutions GALLERY COMMUNITY

SEARCH esri

# 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.

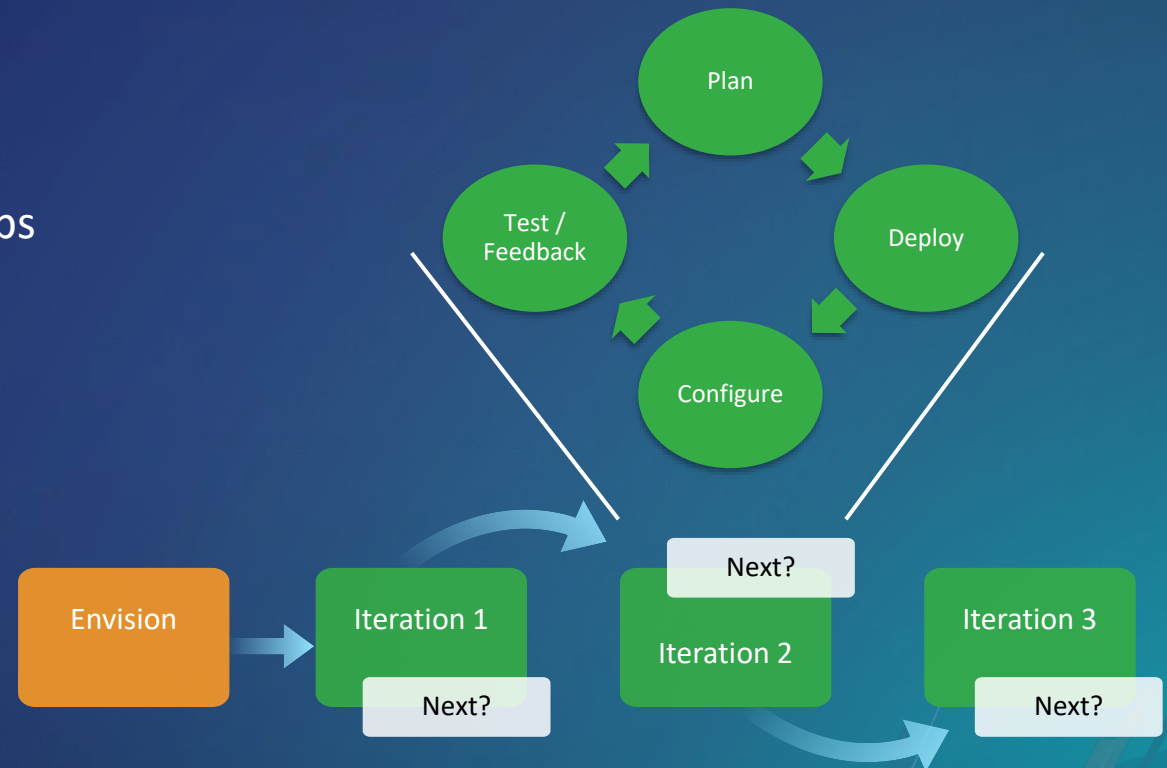
- Local Government
- State Government
- Emergency Management
- Water
- Electric
- Gas
- Defense
- Telecommunications
- Parks & Gardens

Show Me!

# How do I get started?

Leverage solution offerings to maximize technical expertise and minimize deployment time

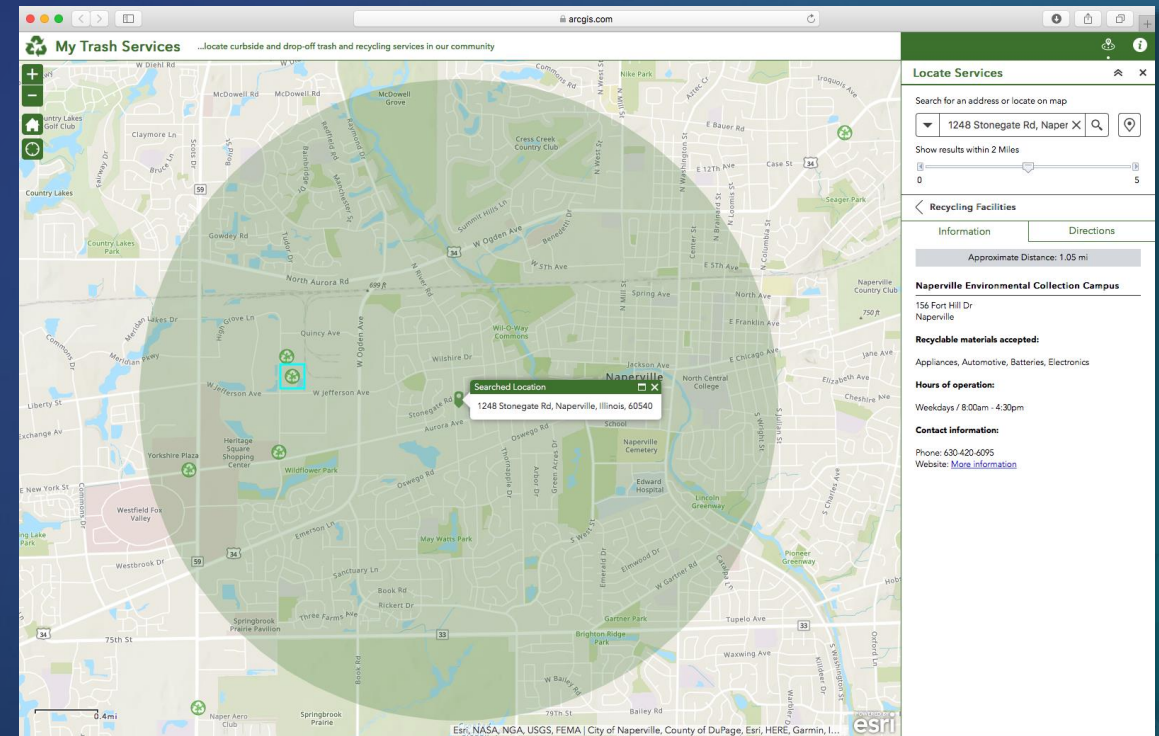
- Deploy quick wins
  - Configure your mapping platform
  - Align with strategic business needs
  - Implement one or more focused maps and apps
  - Organize your data
  - Iterate....



...embrace an agile implementation approach

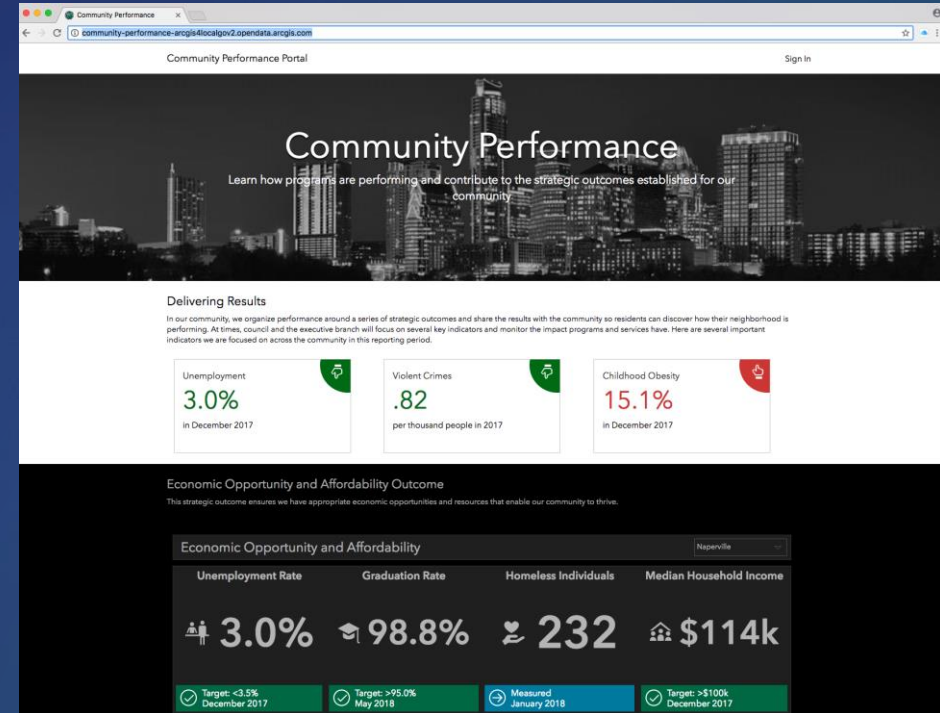
# What's New

- New offerings that support strategic initiatives like
  - Vision Zero / Crash Analysis
  - ROW Permitting
- Enhancements to existing offerings
  - Capital Project Planning
  - Public Engagement
    - My Trash Services



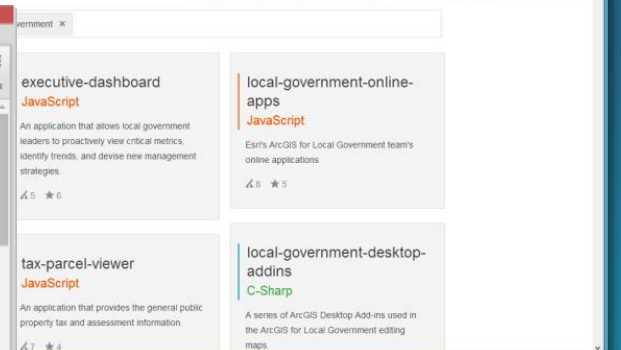
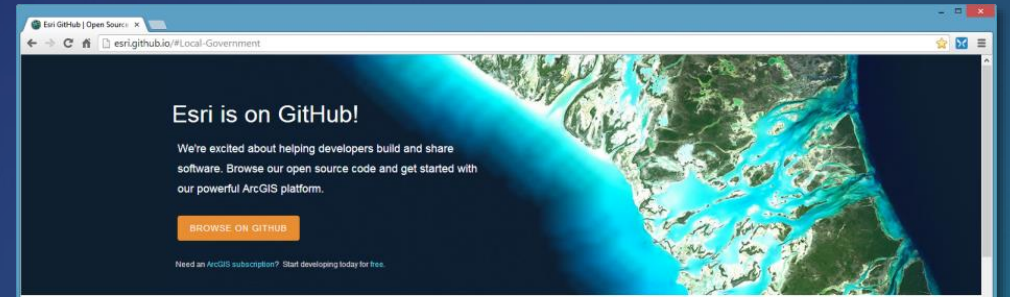
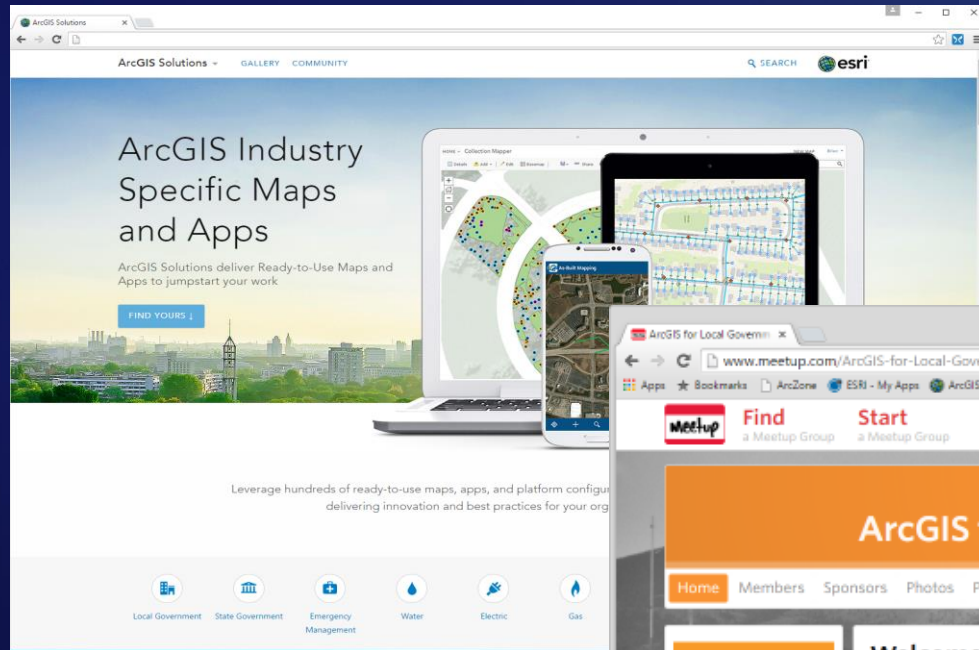
# Road Ahead

- Simply, simplify, simplify
- Snow operations
- Asset condition / rating
- Public engagement



# The Community

It's not just about the technology



# Closing

- Deliver a public works GIS that enables your 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

# Thank you

Be innovative, aware, and know you are not alone

-  <http://solutions.arcgis.com/#Local-Government>
-  <http://meetup.com/ArcGIS-for-Local-Government/>
-  [@ArcGISLocalGov](https://twitter.com/ArcGISLocalGov)
-  <http://esri.github.com>





**esri**

**THE  
SCIENCE  
OF  
WHERE**