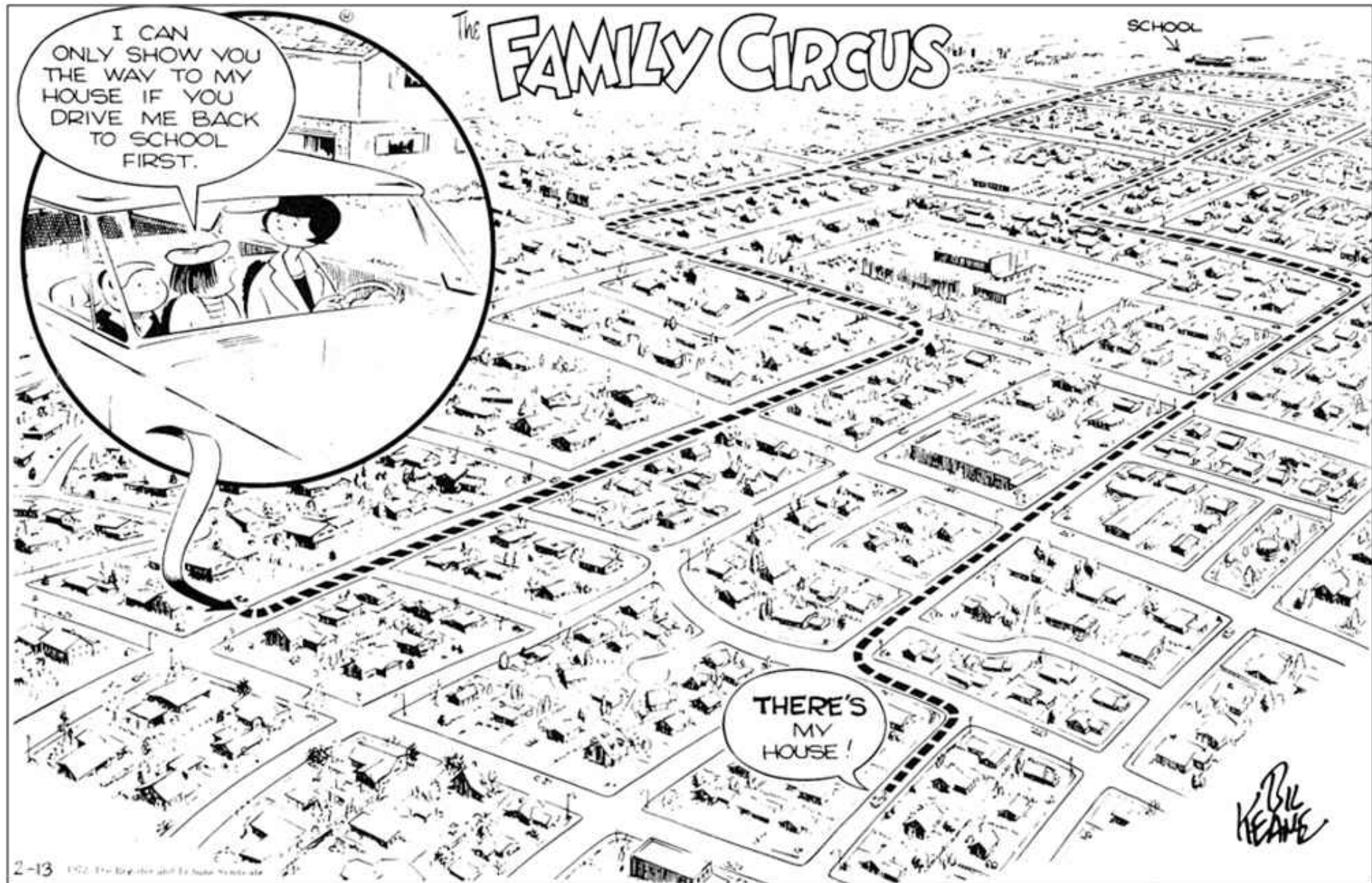


Making the Most of Maximo and ArcGIS Integration

Andy Stewart
ActiveG - Managing Partner



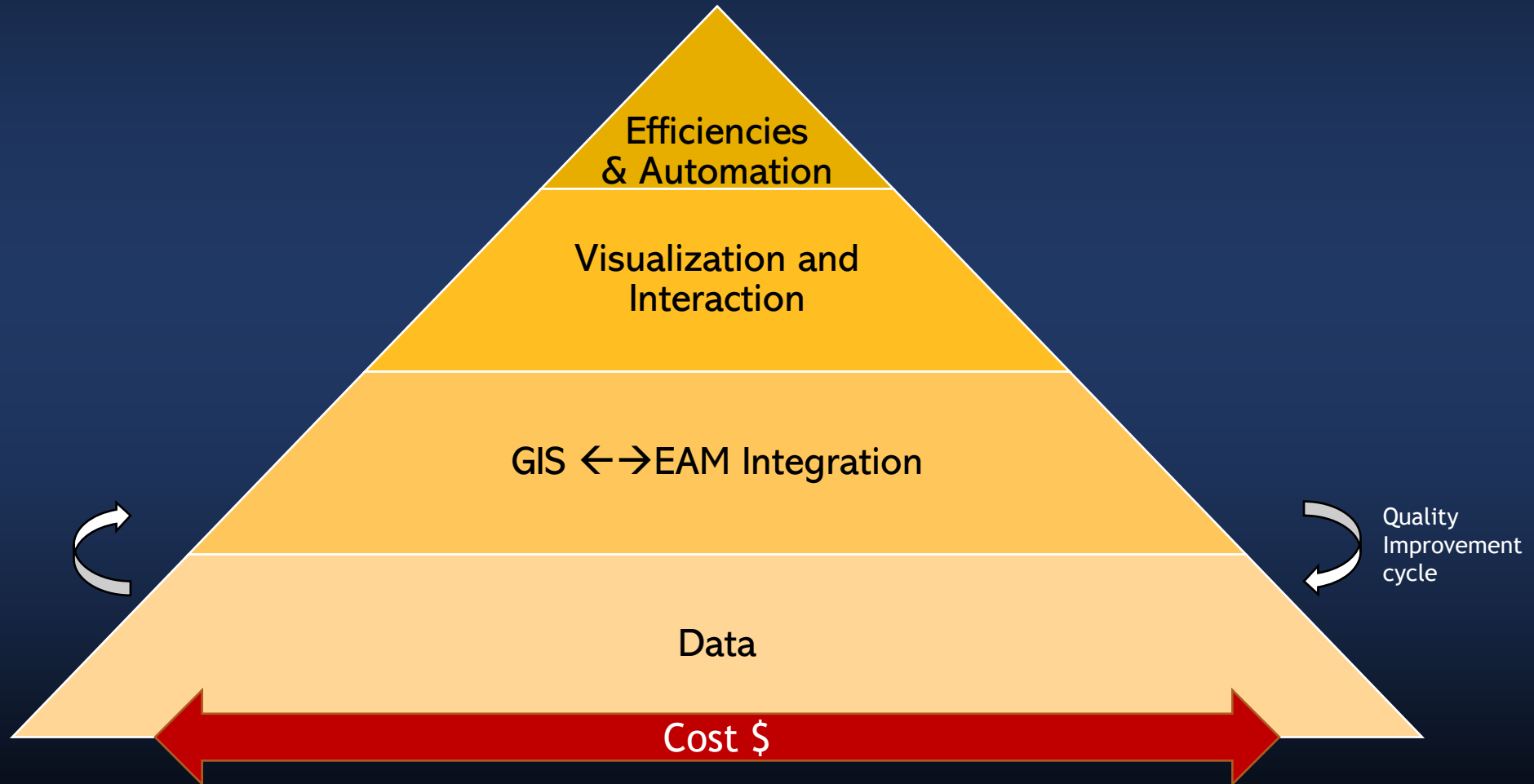




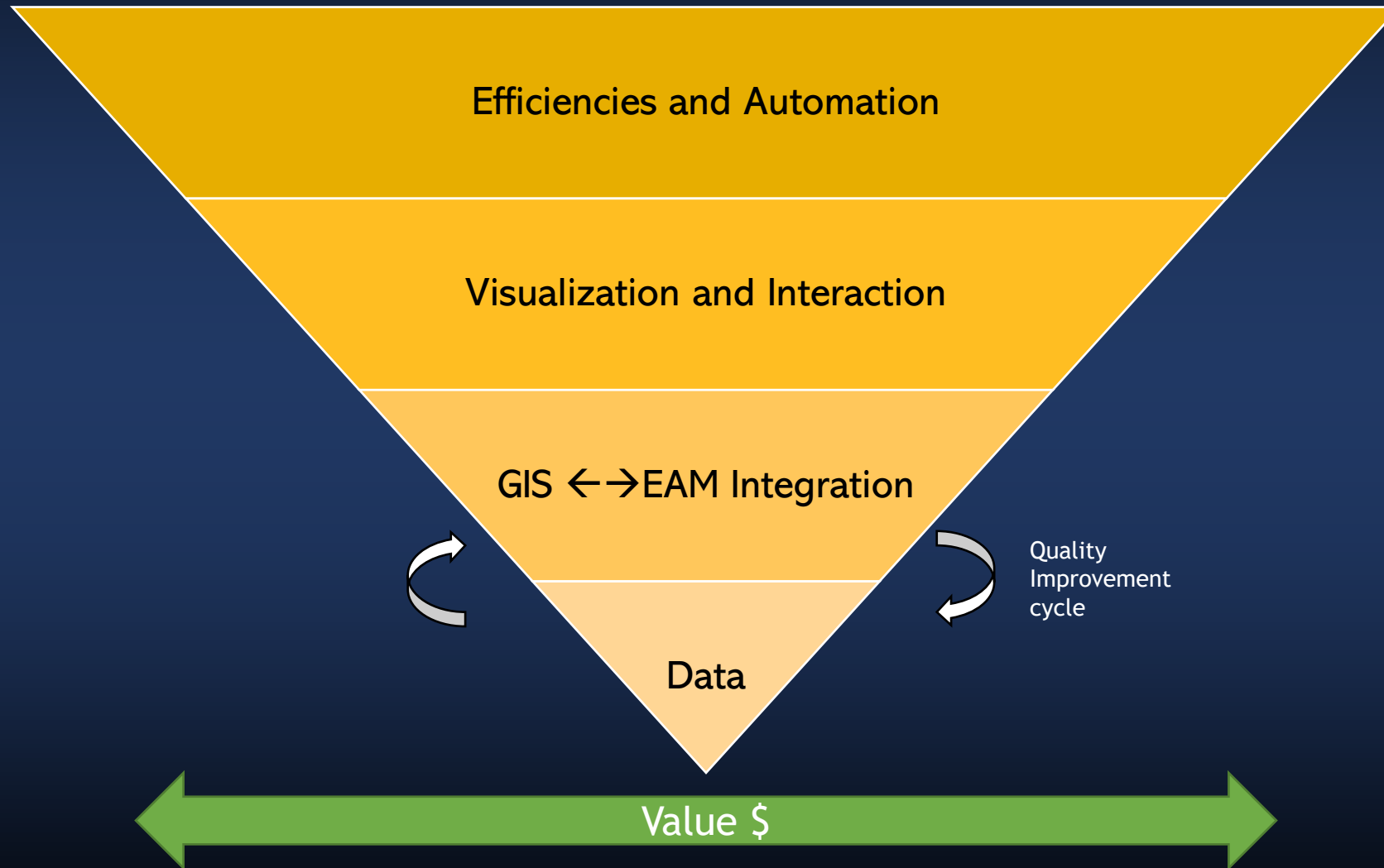
Happy to be
2nd Place

What's happening?

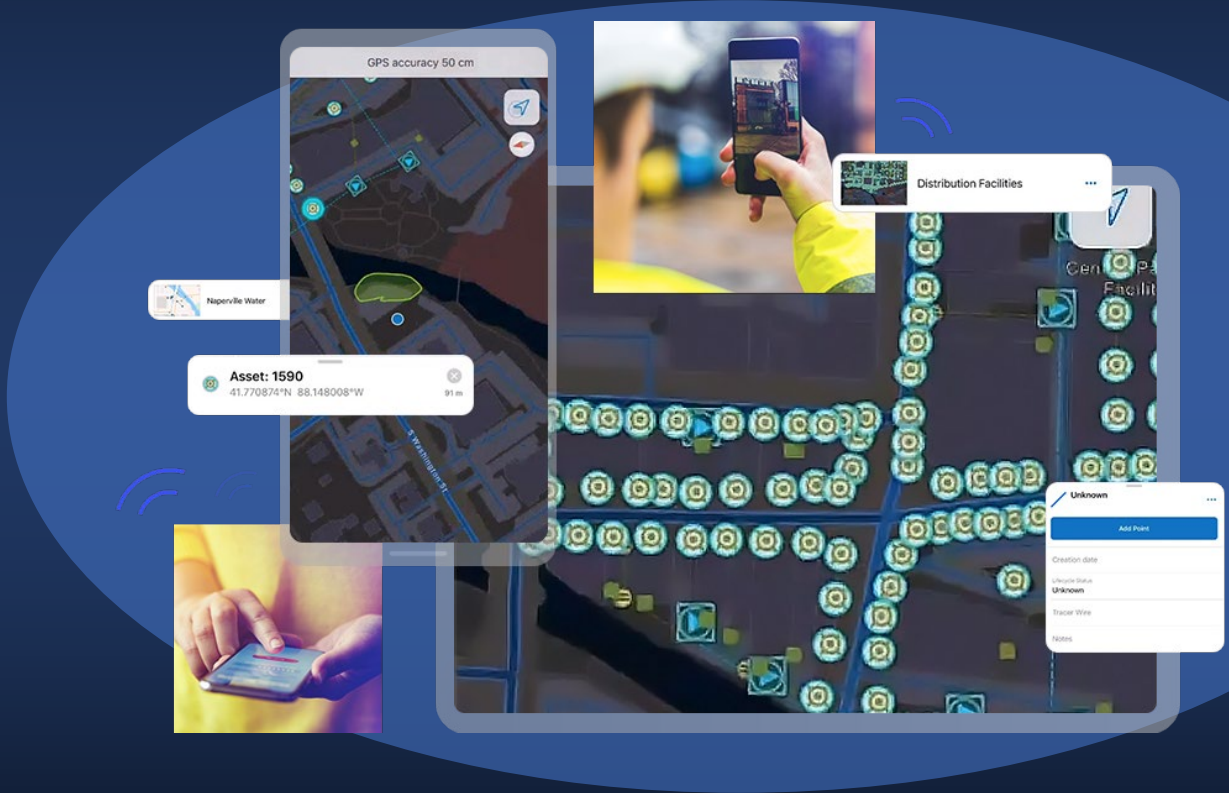
Building the GIS/EAM integration pyramid



Building the GIS/EAM integration pyramid



Esri Solutions



Esri Solutions

											
Agriculture <ul style="list-style-type: none">• Monitor invasive pests• Protect Water Quality	Assessment and Taxation <ul style="list-style-type: none">• Public Notification• Address Field Operations	Elections <ul style="list-style-type: none">• Election Management	Emergency Management <ul style="list-style-type: none">• EMS• Damage assessment• Debris reporting	Fire Service <ul style="list-style-type: none">• Fire incident dashboard• Hydrant inspection	Fish and Wildlife <ul style="list-style-type: none">• Conservation easement monitoring• Wildlife Observations	Health and Human Services <ul style="list-style-type: none">• Community Health Assessment• Homeless Point-in-Time Counts• Mosquito Surveillance	Law Enforcement <ul style="list-style-type: none">• Daily Activities Dashboard• Special Event Operations	Natural Resources <ul style="list-style-type: none">• Dam Safety• Conservation easement monitoring	Planning and Development <ul style="list-style-type: none">• Public Notification• Citizen Problem Reporter• Code Enforcement	Public Works <ul style="list-style-type: none">• Lead Service Line Inventory• ROW Asset Inventory• Citizen Problem Reporter• Public Notification• Fleet Management	Transportation <ul style="list-style-type: none">• ROW Asset Inventory• Capital Project Tracking• Participatory Budgeting• Citizen Problem Reporter

Lead Service Line Inventory

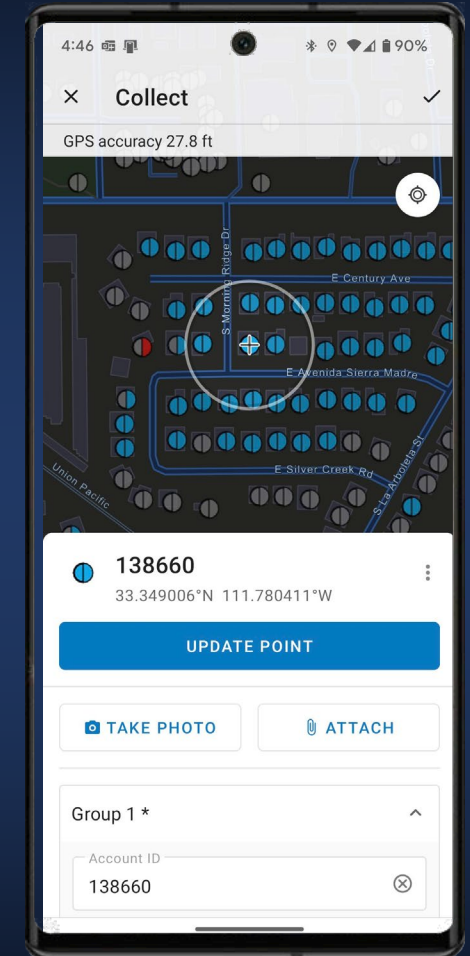
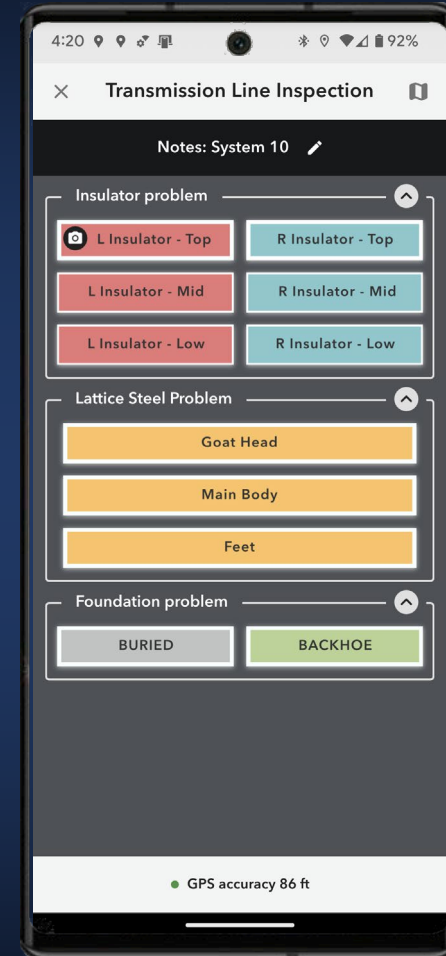
Apps



Esri Field Apps

Esri Field Apps help you to:

- Create and configure maps to fit your organization's Maximo and GIS workflows.
- Collect and update information in the field and log your current location.
- Use the apps online or offline—regardless of your network availability.



Reasons companies choose ArcGIS/Maximo Integration

The screenshot shows a 'Leak Report' form with the following fields and options:

- Break Location?***: A horizontal line with two radio buttons. The left radio button is labeled 'Service Line' and the right radio button is labeled 'Main Line'. The 'Service Line' radio button is selected.
- Is Field Services needed for a repair?***: A horizontal line with two radio buttons. The left radio button is labeled 'Yes' and the right radio button is labeled 'No'. The 'Yes' radio button is selected.
- Water Loss? (Gallons)**: A text input field containing the value '12³'.
- Cause of Leak?**: A text input field containing the value 'BOLTED COUPLING/JOINT'.

- Easy to configure and deploy
 - No coding required
- Spatial visualization baked into the entire process
- Easy to tailor the process to client needs
- Robust reporting
- Closed loop
 - Report→Validate→Repair→Report
- Simple, effective user interface

WUA Hydrants

7,847

Waiting Inspection

Last update: 4 seconds ago

WUA Hydrants

9,345

Passed

Last update: 4 seconds ago

Private Hydrants

3,740

Waiting Inspection

Last update: 3 seconds ago

WUA Hydrants

402

Failed (Total)

Last update: 4 seconds ago

WUA Hydrants

919

Needs Attention (Total)

Last update: 4 seconds ago

Private Hydrants

547

Passed

Last update: 4 seconds ago

WUA Hydrants

402

Inoperable (Current)

Last update: 3 seconds ago

WUA Hydrants

919

Needs Attention (Current)

Last update: 4 seconds ago

Private Hydrants

20

Needs Attention

Last update: 3 seconds ago

WUA Hydrants

0

Repaired (QA)(Inop)

Last update: 4 seconds ago

WUA Hydrants

0

Repaired (QA)(NA)

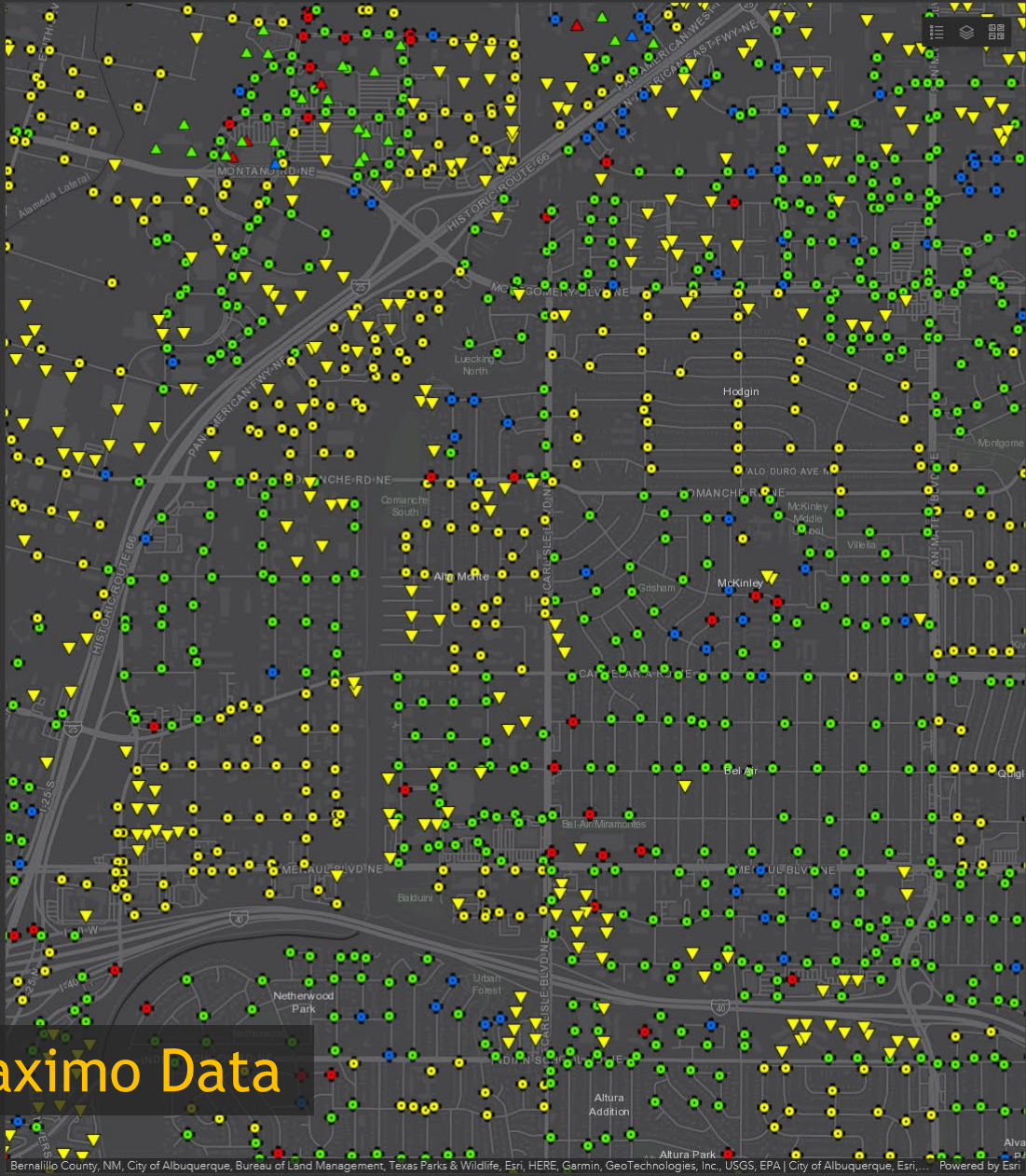
Last update: 4 seconds ago

Private Hydrants

65

Failed

Last update: 3 seconds ago



1 of 200

LAST 200 WUA HYDRANT INSPECTIONS

HydrantInspections: 22338

CreationDate	9/20/2022, 10:56 AM
AssetNUM	22338
Inspector Badge Number	163
Missing hydrant?	No
Water flow problem?	No
Stem nut problem?	Operable
Cap frozen?	No
Threads damaged?	No
Leaking?	No
Will not drain?	No
Loose hydrant?	No
Damaged barrel?	No
Brown water?	No
Mapping error?	No
Horizontal clearance?	No
Needs paint?	No
Needs chains?	Yes
Turned wrong way?	No
Needs Lowered or Raised?	No
Needs attention? Leave notes.	No
Notes	
Inspection Status	Waiting for Inspection
Workorder num	
Creator	Station36_BCFD

Last edited by Station36_BCFD on 9/20/2022, 10:56 AM.

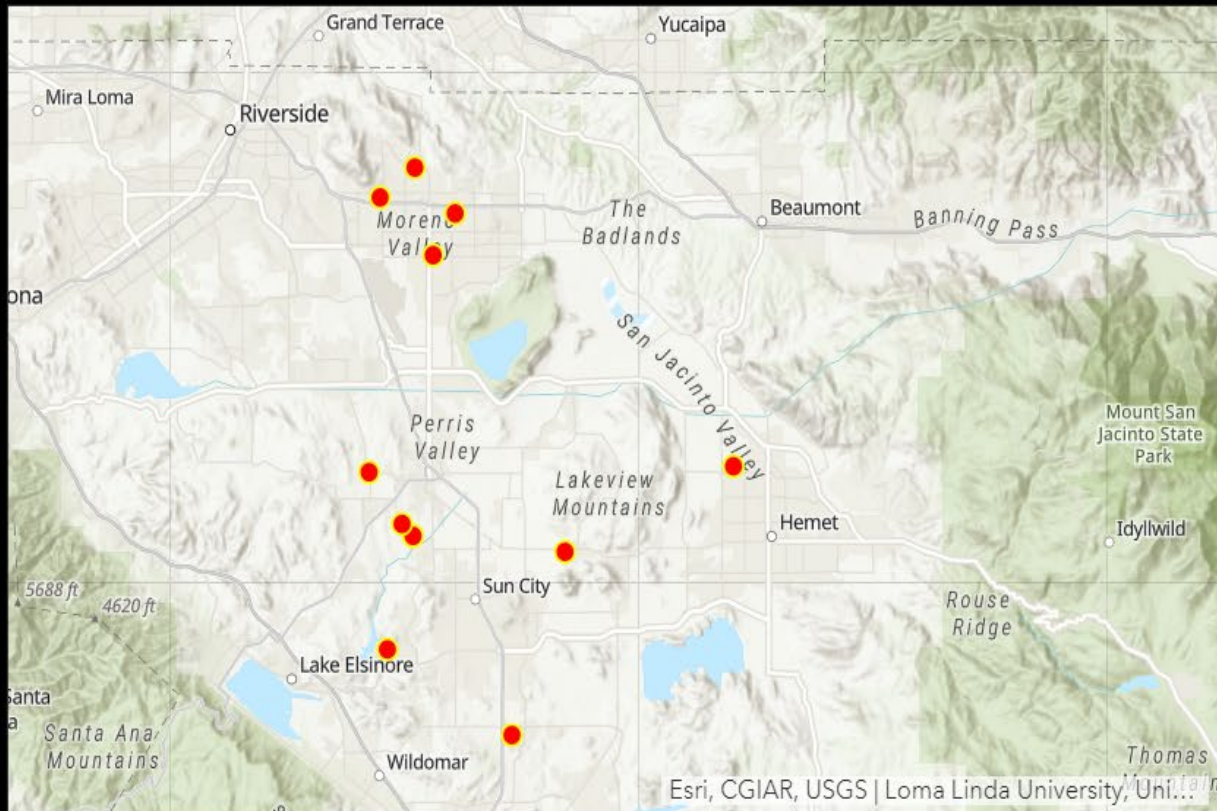
All Inspections

Private Inspections

Leak Surveys by day



Last update: a minute ago



Esri, CGIAR, USGS | Loma Linda University, UH...

Leak_Report_PROD: 15

CreationDate 10/22/2020, 6:05 AM

Creator brennea_EMWD

wonum 3264184

Break Location? Main Line

Is Field Services No
needed for a
repair?

Water Loss?
(Gallons)

Cause of Leak? JOINT FAILURE

Pipe Size? 08

Pipe Type? Dipped & Wrapped

Last update: a few seconds ago

Total Surveys

13

Last update: a few seconds ago

Need Field Services

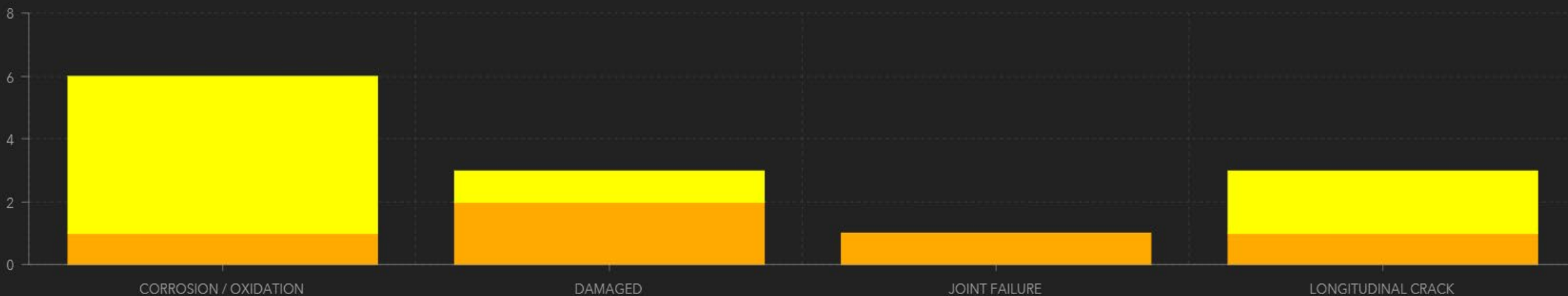
8

Last update: a few seconds ago

No Field Services

5

Last update: a few seconds ago



Last update: a few seconds ago

Catchbasin Inspections

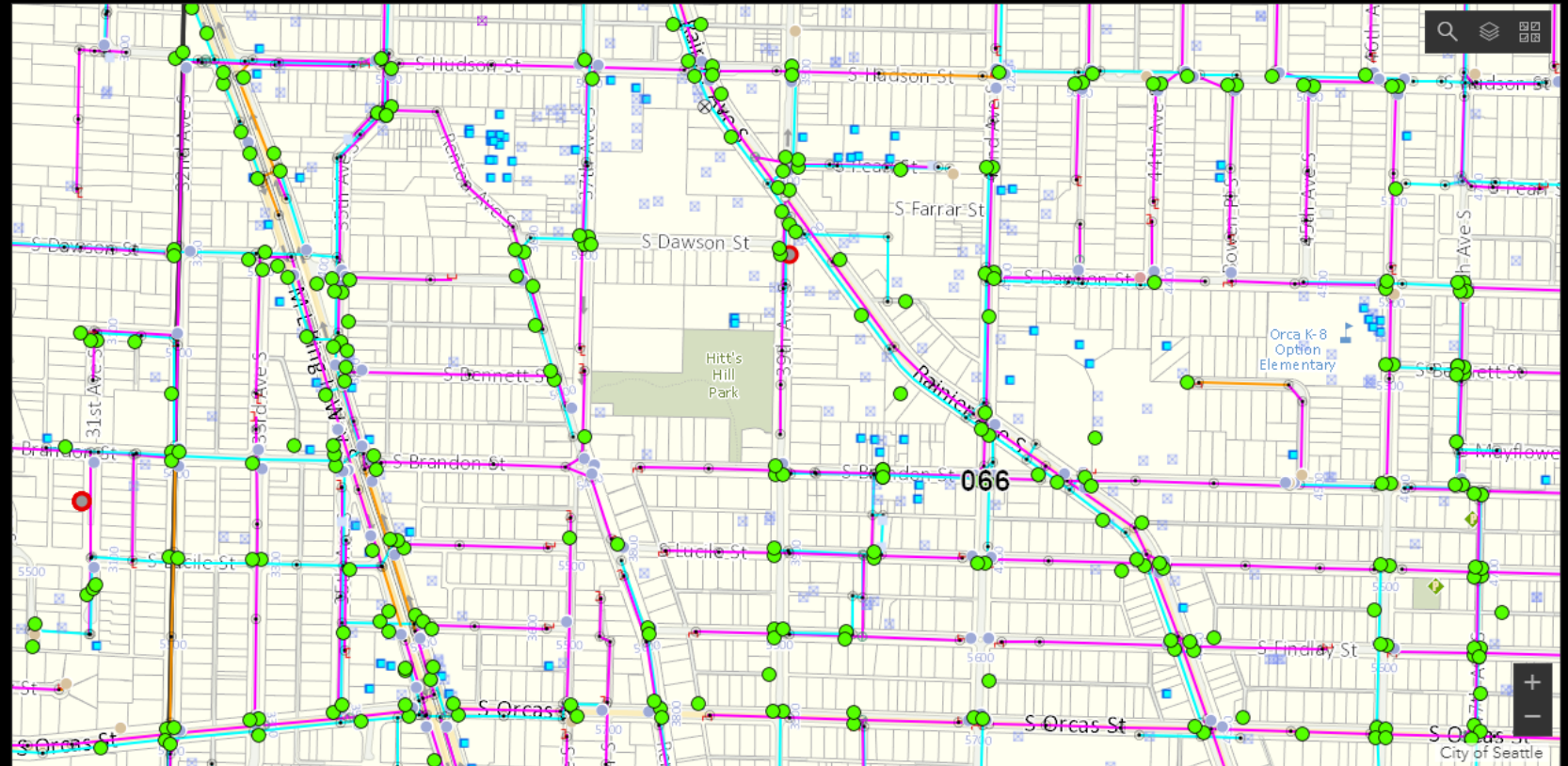
Map Page: All

Insp Status: ALL STATUSES

Date:

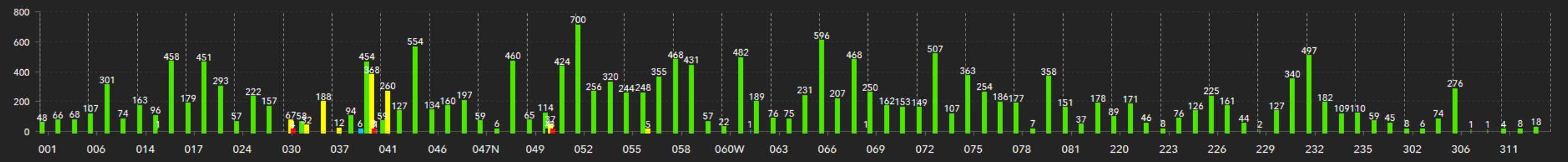
Last Inspector: All

- Catchbasin Inspections
- NOT INSPECTED
 - Complete
 - OVERDUE
 - UTI - CONSTRUCTION SOCK
 - UTI - OTHER
 - UTI - 2ND CREW
- Do Not Inspect
- NOT DUE
 - UNABLE TO INSPECT - DO NOT GO BACK
- Water Valve Functions
- LINE
 - PZ Boundary
 - Pump Station
 - Pressure Regulator
 - Bypass
 - Water Supply
 - Other Air



Inspections by status and map page selected:

17,980



Ditch and Culvert Inspections

Last Inspector (Culverts):
All

Last Inspector (Ditches):
All

Map Page:
All Pages

Inspection Status:
All Statuses

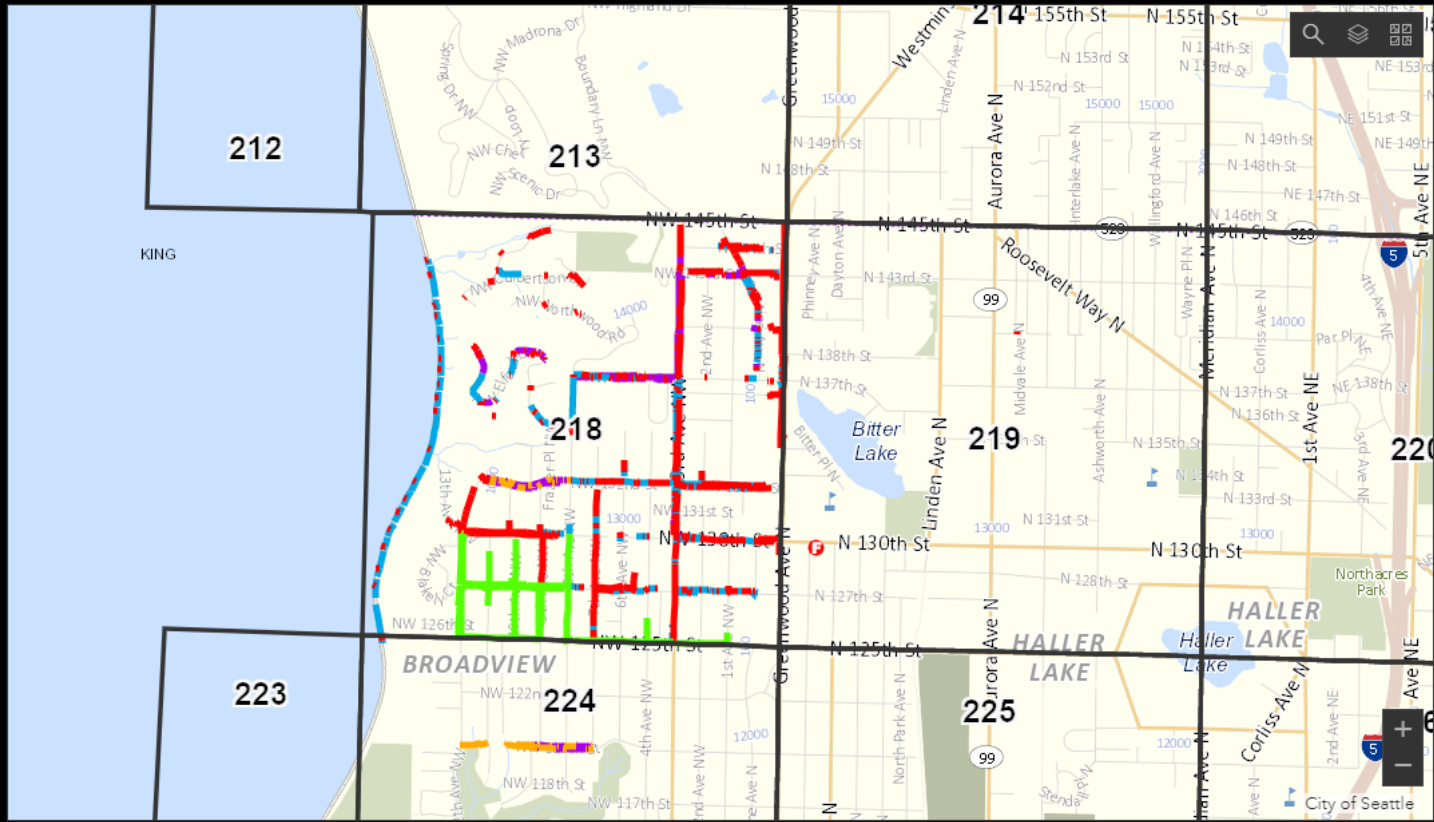
- Inspections: Culverts
- 60 NOT INSPECTED

6, 12 NOT INSPECTED

INSPECTED
- Inspections: Ditches
- 60 NOT INSPECTED

6, 12 NOT INSPECTED

INSPECTED

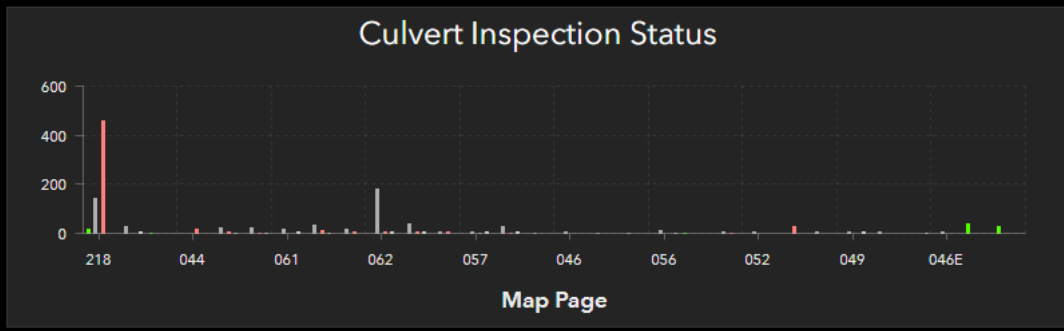
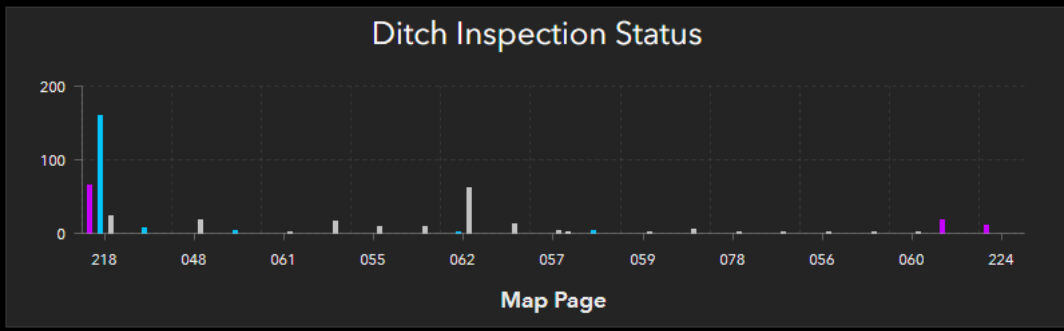


Inspections by status and map page:

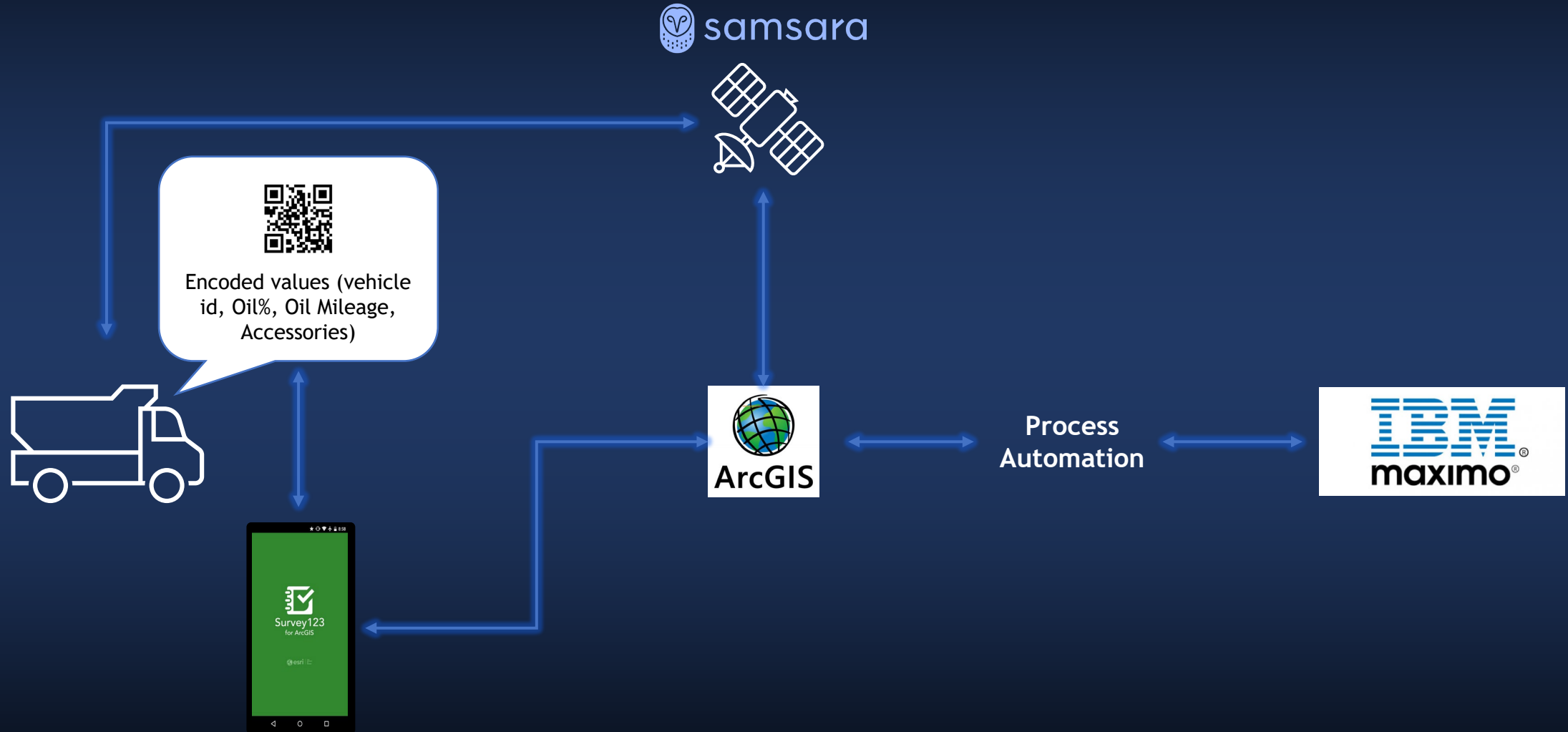
1,265
Culverts

Inspections by status and map page:

439
Ditches



Fleet safety and maintenance management with ArcGIS

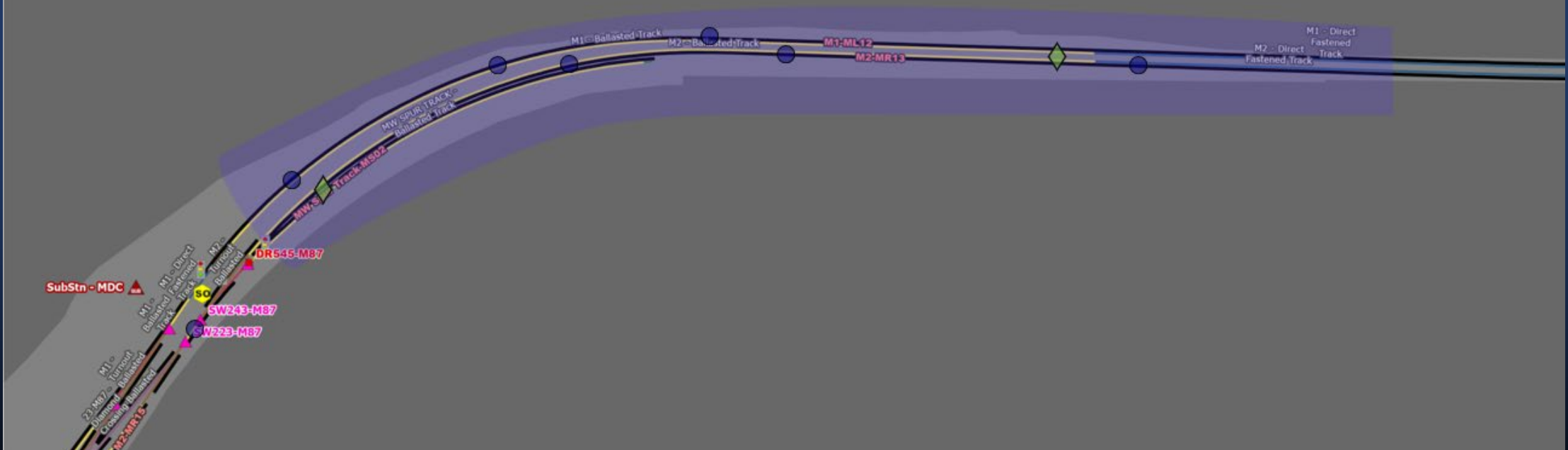


Corrective Maintenance Maximo WO

Planned Mitigations (Projects)

System Access Request (APPR)

Transit Rail Maintenance



Emergency Dispatch

Background: Rapid response to reported gas leaks is critical. Client needed a way to assign the nearest, available, qualified crew to gas emergency work orders.

General

Search...

Job Code:

290 - Leak Repair

Description:

Leak Repair Workorder

Status:

APPR

Location:

LKMX2135016

Address:

167 JEFFERSON AVE RAHWAY, NJ 07065

Asset:

2320467 - R 275 Temperature Compensated

Field Lead:

null - null

Find Vehicle

Add to Maximo List

Name

Travel(min.)

Miles

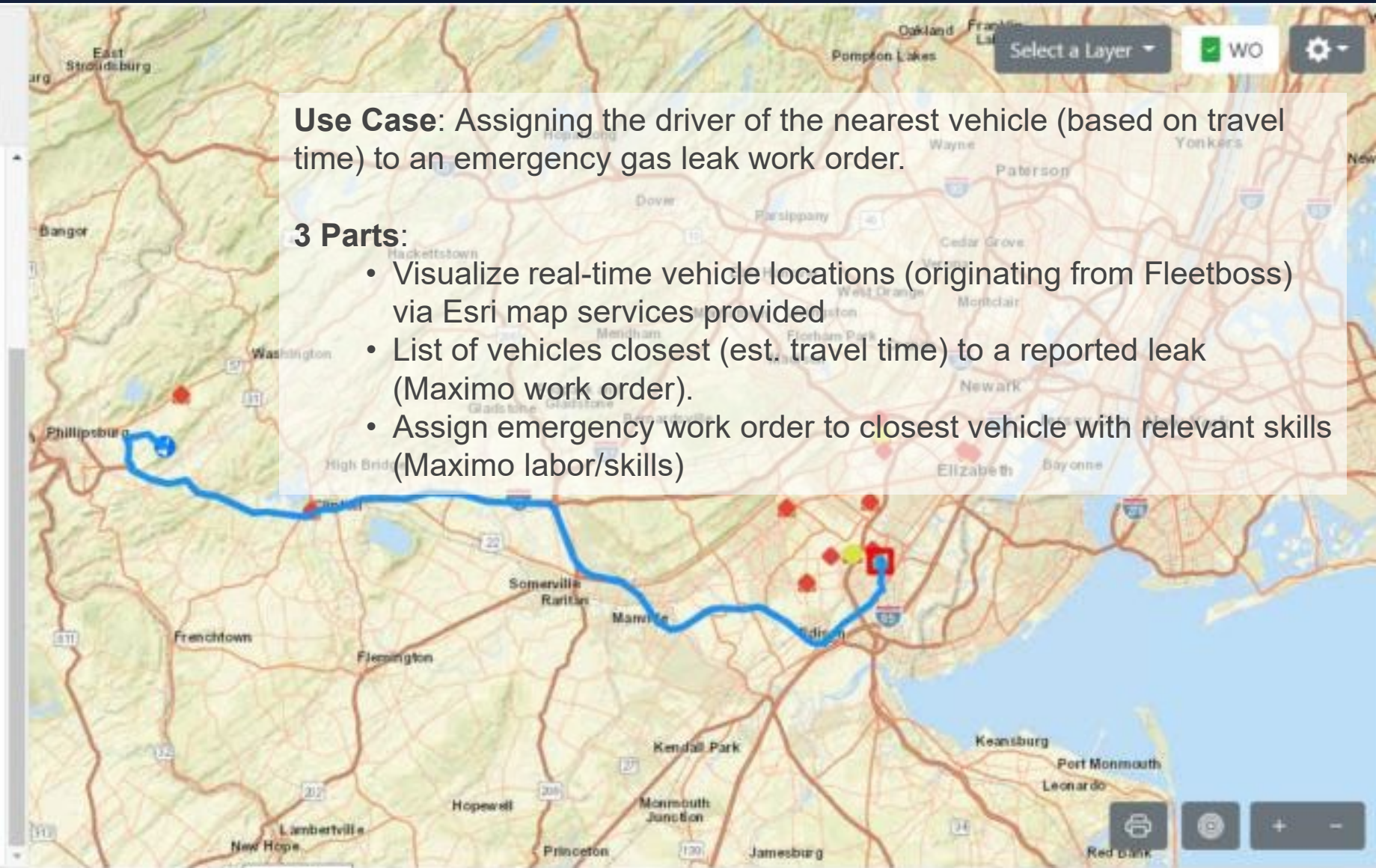
Cape May Utility Worker #4

65

56.8

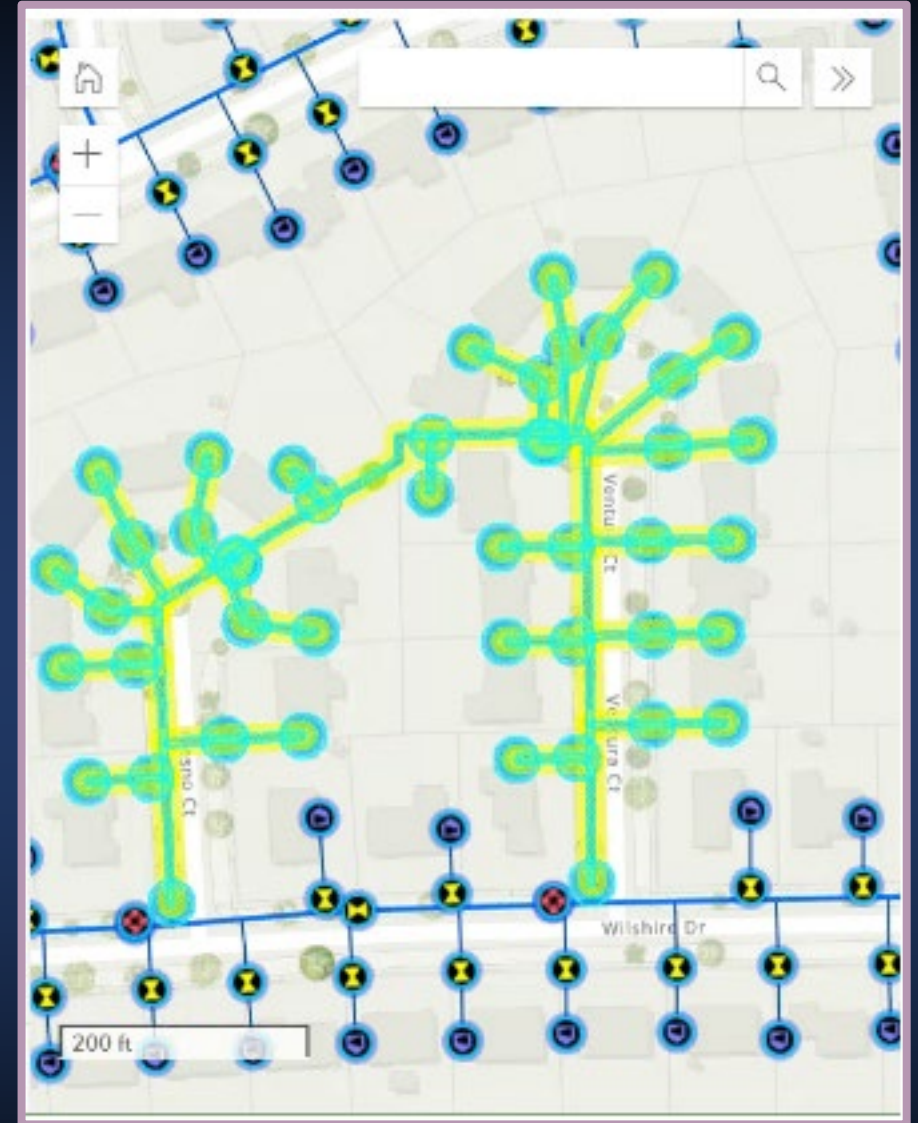
Filter

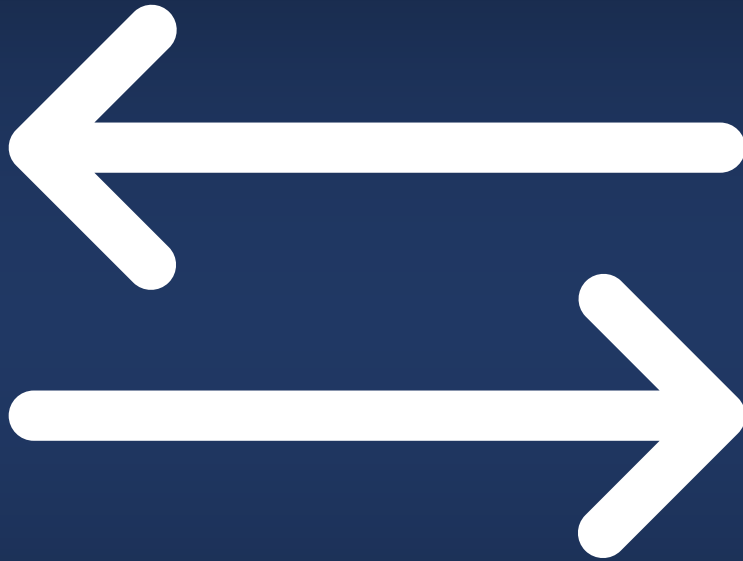
Assign



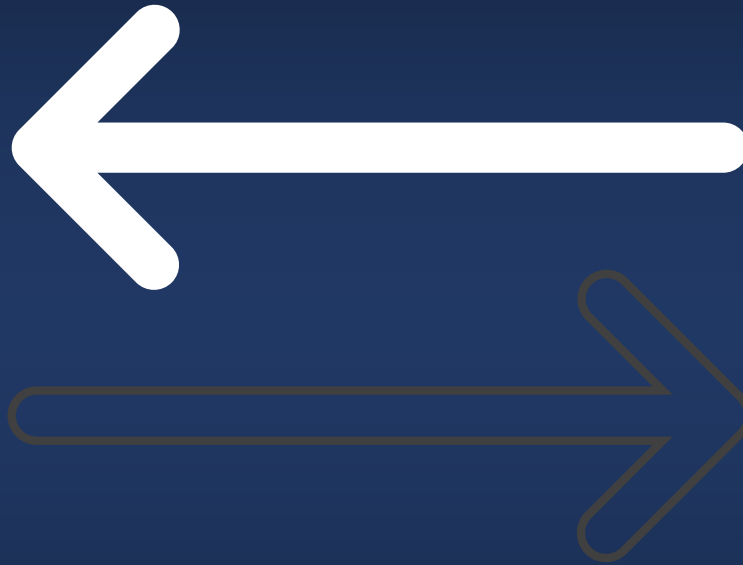
ArcGIS Utility Network

- Network domains let you model operation and structural networks in an integrated fashion,
- Network rules help you build networks that suit your business requirements.
- Trace network features upstream or downstream from a given location.
 - water utilities can determine which valves to shut off when a pipe bursts.
 - an outage from an electrical network can affect the delivery of another resource, such as gas or water.





Start with data sync



Only sync essentials for decisions

Build fit-for-purpose processes

4:20 92%

Transmission Line Inspection

Notes: System 10

Insulator problem

<input checked="" type="radio"/> L Insulator - Top	<input type="radio"/> R Insulator - Top
<input type="radio"/> L Insulator - Mid	<input type="radio"/> R Insulator - Mid
<input type="radio"/> L Insulator - Low	<input type="radio"/> R Insulator - Low

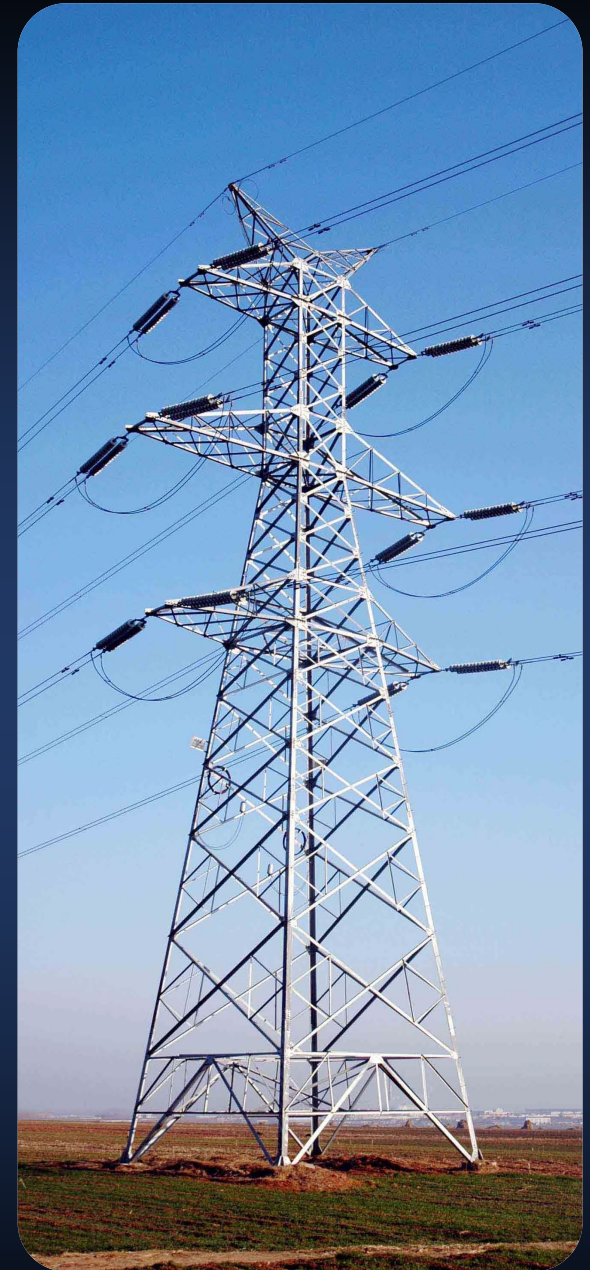
Lattice Steel Problem

<input type="radio"/> Goat Head
<input type="radio"/> Main Body
<input type="radio"/> Feet

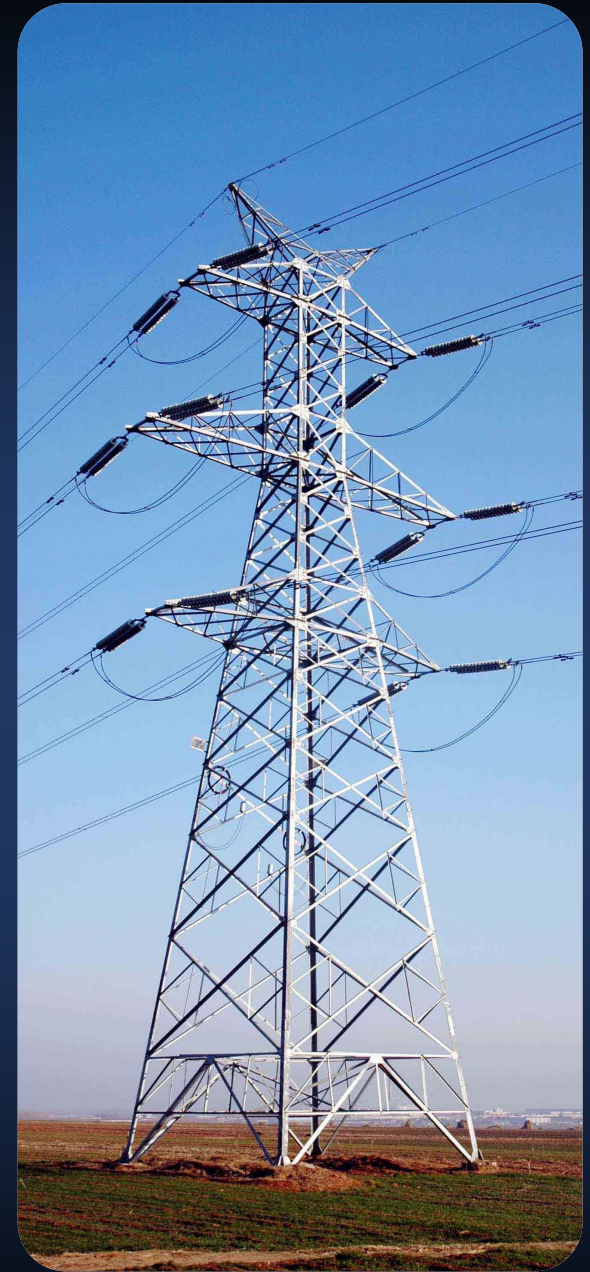
Foundation problem

<input type="radio"/> BURIED	<input type="radio"/> BACKHOE
------------------------------	-------------------------------

GPS accuracy 86 ft



Leverage location
intelligence to
streamline user
experience



4 Keys to Useful GIS/Maximo Integration

- Start with data sync
- Only sync essentials needed for decisions
- Build fit-for-purpose processes
- Leverage location intelligence to streamline user experience