



Sky-High ROI: Supporting Rural Communities & Agencies with GIS

Poe & Associates, Inc.

- Founded in 1967
- Employee Owned, **Oklahoma Based**
- 88 Employees in Oklahoma, 27 Licensed Engineers in Oklahoma
- Areas of Practice
 - Transportation Engineering
 - Planning Studies
 - Streets & Highways
 - Bridges
 - Program Management
 - Construction Management
 - Utility Coordination & Relocation
 - Right-of-Way
 - GIS
 - Survey
 - Public Involvement
 - Grant Writing



GIS Team

➤ Jeremy Planteen

- Nearly 20 years experience in GIS
- Wyoming SHPO, ODOT
- Established nationally recognized GIS group at ODOT
- GIS enterprise system integration, web GIS

➤ Sam Coldiron

- 10 years experience
- Led GIS group at ODOT
- Highly proficient in GIS process automation and back-end integrations

➤ Kaitlin Ashworth

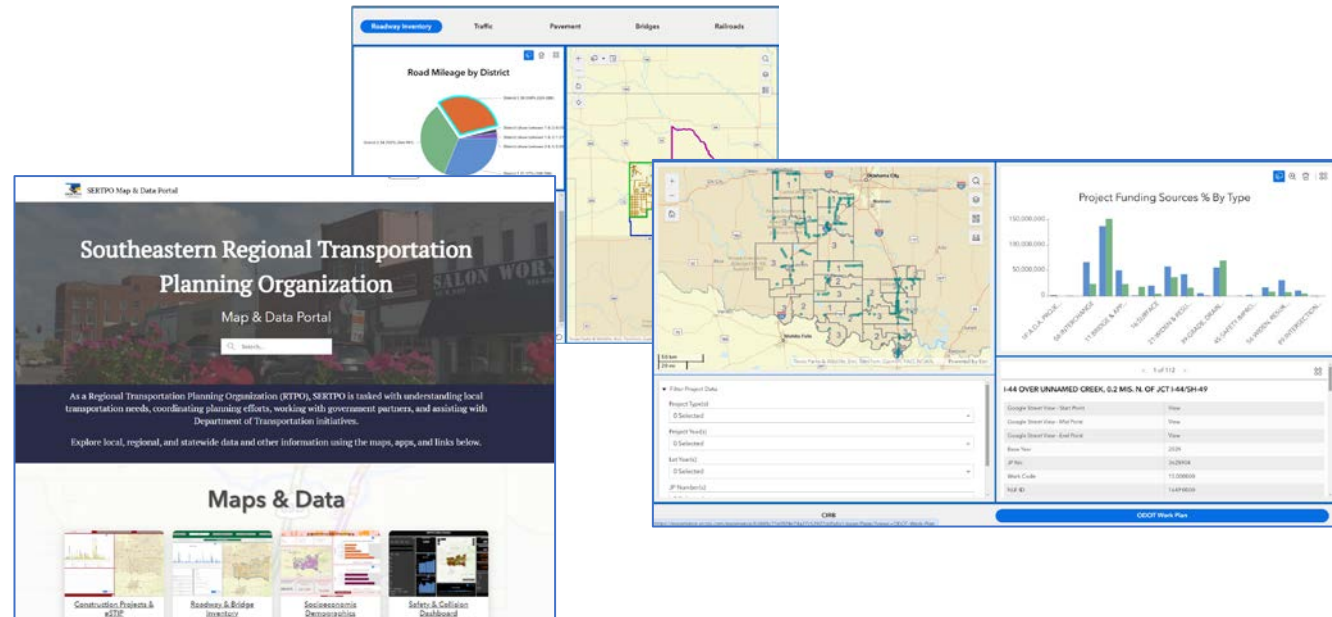
- 5 years experience
- Expertise in cartography, GIS for client & public engagement

➤ Rachel Porter

- 2 years experience
- GIS Technician versed in CAD to GIS and mapping

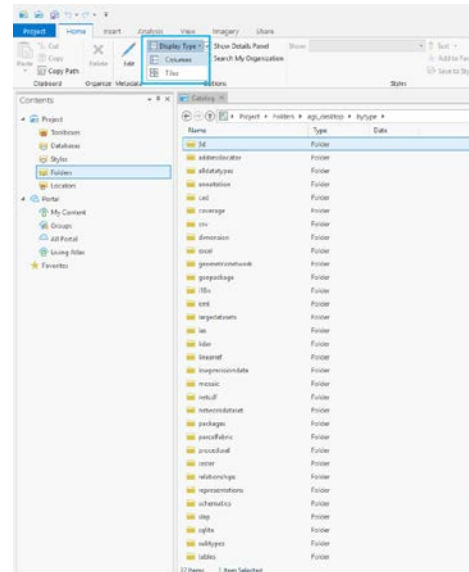
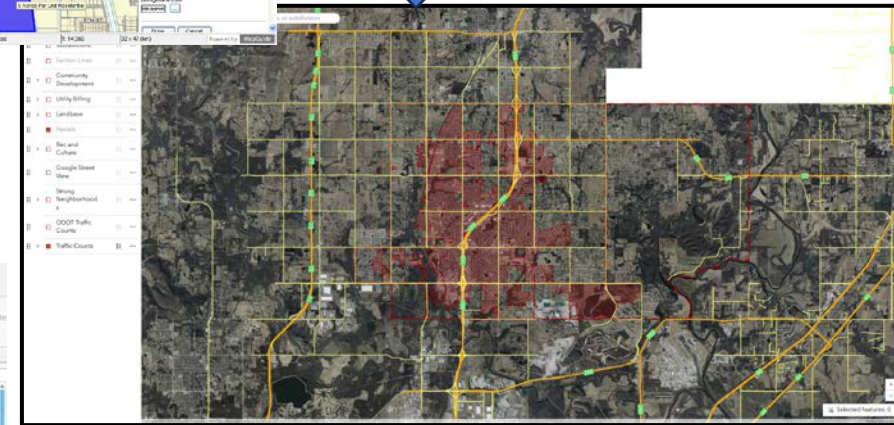
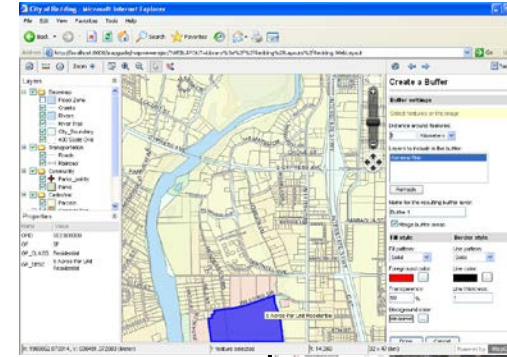
GIS Projects at Poe

- Back office support for all engineering and program management projects
- Extensive GIS support for Planning projects (SORTPO, CTMPO, City of McAlester)
- Turnkey GIS systems for small governments (SERTPO, KEDDO, North Enid, etc.)
- Backend system support (SWOK NG911)
- Full system migrations (OTA)
- Business intelligence (ODOT)



Moving to ArcGIS Online or Enterprise

- Transition from Legacy or Other web mapping systems onto ArcGIS Online or Enterprise
- Recreate current web maps in Experience Builder or ESRI Dashboards with newer enhancements
- Data Cataloging to ensure complete movement of all needed GIS Feature Services



Upgrading Current ESRI Systems

- We can assist with upgrades to your current ESRI systems
- We work with your IT staff to perform snapshot backups, schedule the outage for the upgrade, and help perform the upgrade
- This can be performed in place or migrated to new VMs if upgrading multiple versions is needed.
- ESRI Enterprise Life Cycle
 - <https://support.esri.com/en-us/products/arcgis-enterprise/life-cycle>

ArcGIS Enterprise - Windows/Linux Life Cycle

Version	Release Date	General Availability	Extended Support	Mature	Retirement
12.0	November 18, 2025	Nov 18, 2025–Next Release			
11.5	May 22, 2025	May 22, 2025–May 31, 2027	Jun 01, 2027–May 31, 2029	Jun 01, 2029–May 31, 2031	June 01, 2031
11.4	November 07, 2024	Nov 07, 2024–Apr 30, 2026		May 01, 2026–Nov 30, 2027	December 01, 2027
11.3	May 23, 2024	May 23, 2024–May 31, 2026	Jun 01, 2026–May 31, 2028	Jun 01, 2028–May 31, 2030	June 01, 2030
11.2	November 09, 2023	Nov 09, 2023–May 31, 2025		Jun 01, 2025–Nov 30, 2026	December 01, 2026
11.1	April 20, 2023	Apr 20, 2023–Apr 30, 2025	May 01, 2025–Apr 30, 2027	May 01, 2027–Apr 30, 2029	May 01, 2029
11.0	July 22, 2022	Jul 22, 2022–Jan 31, 2024		Feb 01, 2024–Jul 31, 2025	August 01, 2025
10.9.1	November 18, 2021	Nov 18, 2021–Nov 30, 2023	Dec 01, 2023–Nov 30, 2025	Dec 01, 2025–Nov 30, 2027	December 01, 2027
10.8.1	July 28, 2020	Jul 28, 2020–Jul 31, 2022	Aug 01, 2022–Jul 31, 2024	Aug 01, 2024–Jul 31, 2026	August 01, 2026

Pro 3.4.5 and older moves to
Mature Support May 31st!!!

Data ETL and Python Scripting

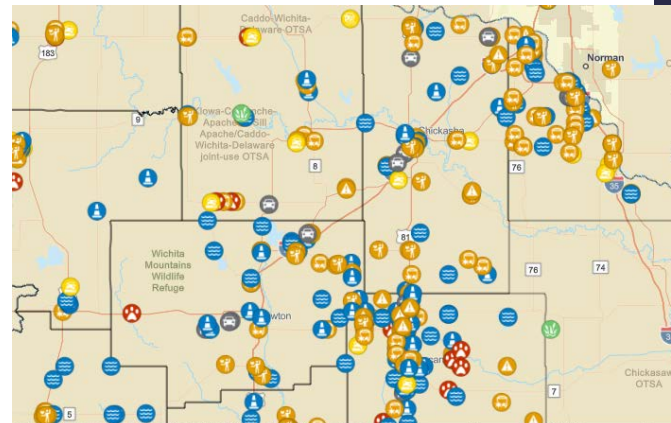
- Add or improve data processing efficiency with custom Models, Python Script Tools, or standalone Python Scripts
- We can help with planning what processes can be scripted, building those tools, and best practices for automating the running of these tools
- These tools will follow best practices and documentation for enhancements or changes down the road.

```
1 import arcpy, arcgis, shutil, os, requests, json
2 from arcgis.gis import GIS
3 from arcgis.features import FeatureLayerCollection
4
5 # Variables
6 sourcePortal = arcpy.GetParameterAsText(0)
7 sourceINA = arcpy.GetParameterAsText(1)
8 sourceUsername = arcpy.GetParameterAsText(2)
9 sourcePassword = arcpy.GetParameterAsText(3)
10 sourceUser = arcpy.GetParameterAsText(4)
11 content = arcpy.GetParameterAsText(5)
12 targetPortal = arcpy.GetParameterAsText(6)
13 targetINA = arcpy.GetParameterAsText(7)
14 targetUsername = arcpy.GetParameterAsText(8)
15 targetPassword = arcpy.GetParameterAsText(9)
16 targetOwner = arcpy.GetParameterAsText(10)
17 targetFolder = arcpy.GetParameterAsText(11)
18 scratchFolder = arcpy.env.scratchFolder
19
20 # Function to update thumbnail
21 def updateThumbnail(previousItem, newItem):
22     '''Function to update the web map/apps thumbnail'''
23     thumbNail = previousItem.download_thumbnail(scratchFolder)
24     if thumbNail:
25         newItem.update(thumbNail=thumbNail)
26         os.remove(thumbNail)
27
28 # Function to clear scratch workspace
29 def clearScratchWorkspace():
30     '''Function will remove all contents from scratch workspace'''
31
32     arcpy.AddMessage("Cleaning up scratch workspace")
33     for root, dirs, files in os.walk(scratchFolder):
34         for file in files:
35             try:
36                 os.remove(os.path.join(root, file))
37             except Exception as e:
38                 arcpy.AddWarning(f"Unable to delete {os.path.join(root, file)}")
39         for dir in dirs:
40             try:
41                 shutil.rmtree(os.path.join(root, dir))
42             except Exception as e:
43                 arcpy.AddWarning(f"Unable to delete {os.path.join(root, dir)}")
44
45 # Sign into source portal
46 arcpy.AddMessage("Signing into source portal")
47 source = GIS(sourcePortal, sourceUsername, sourcePassword, verify_cert=False)
48
49 # Sign into target portal
50 arcpy.AddMessage("Signing into target portal")
51 target = GIS(targetPortal, targetUsername, targetPassword, verify_cert=False)
52
53 # Get Hosted Feature Service ID
54 for val in content.split(';'):
55     itemID = val.split('=')[1]
56     itemID = itemID.replace('_old_', '_new_')
57     itemID = itemID.replace('_old_', '_new_')
58     itemTitle = source.content.get(itemID).title
```

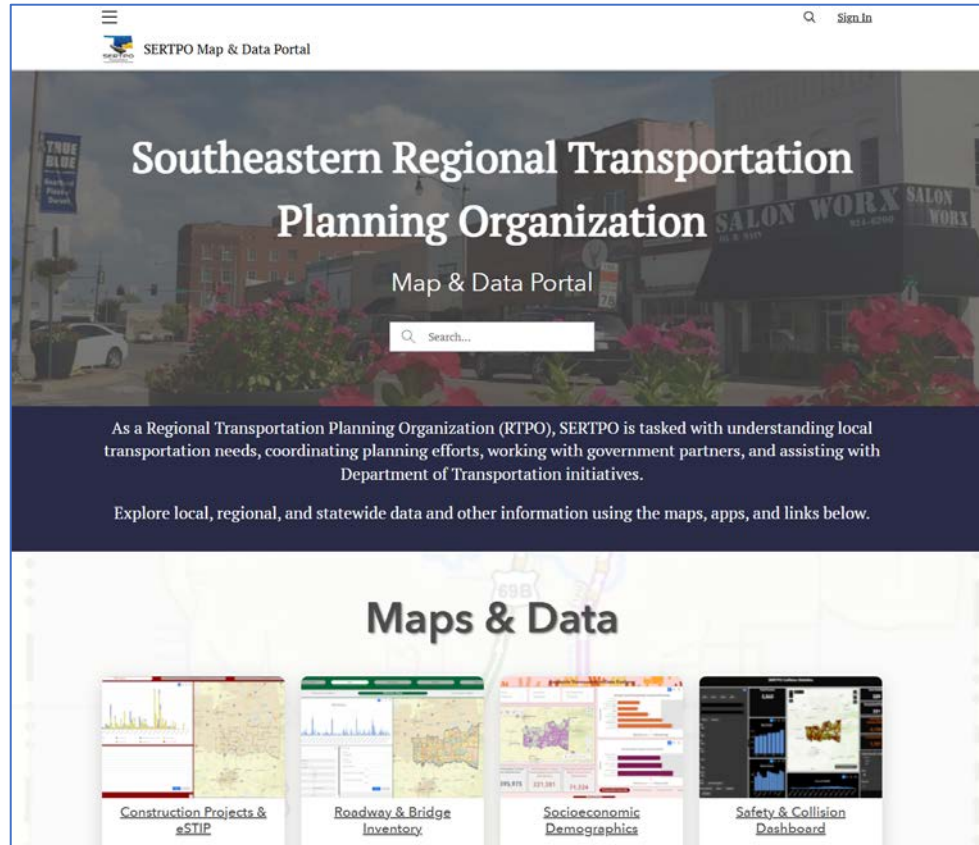


Small Government GIS Portals

- ArcGIS Online
- Very low cost
- Very quick standup
- Community feedback
- Tailored to viewing & basic editing needs
- High value for public engagement & transparency



Small Government GIS Portals

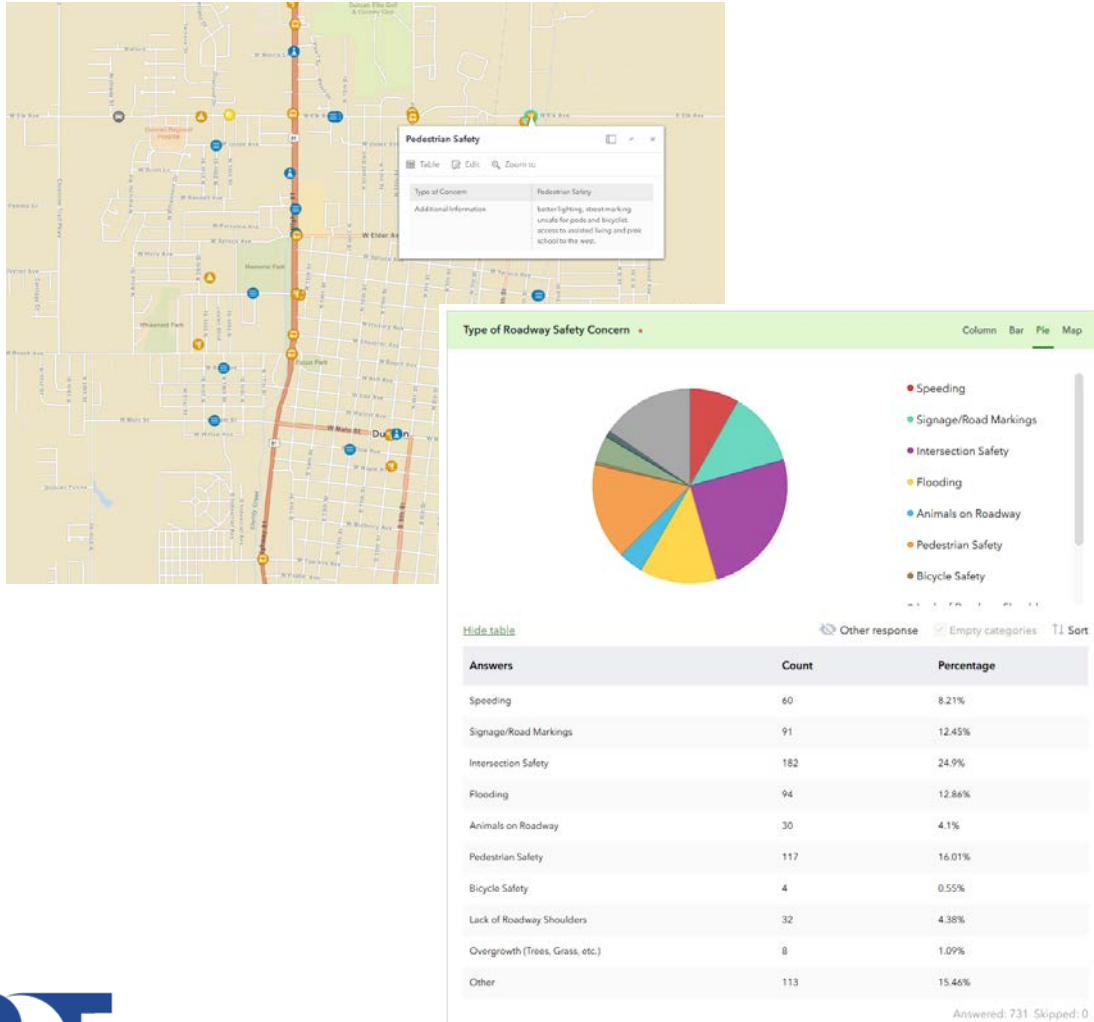


- Medium and small municipalities
- Regional planning organizations
- SORTPO, SERTPO, Town of North Enid, and others
- Budgets are tight, staff often limited
- How can GIS help?

- Federal grants almost exclusively data driven now
- Data is often scattered across multiple sources
- Can be difficult to parse through
- Often needs work to get it into a format suitable for a grant application
- Aggregate data into single apps, focused on specific geographic area
- Massive time savings, ensures correct data for application



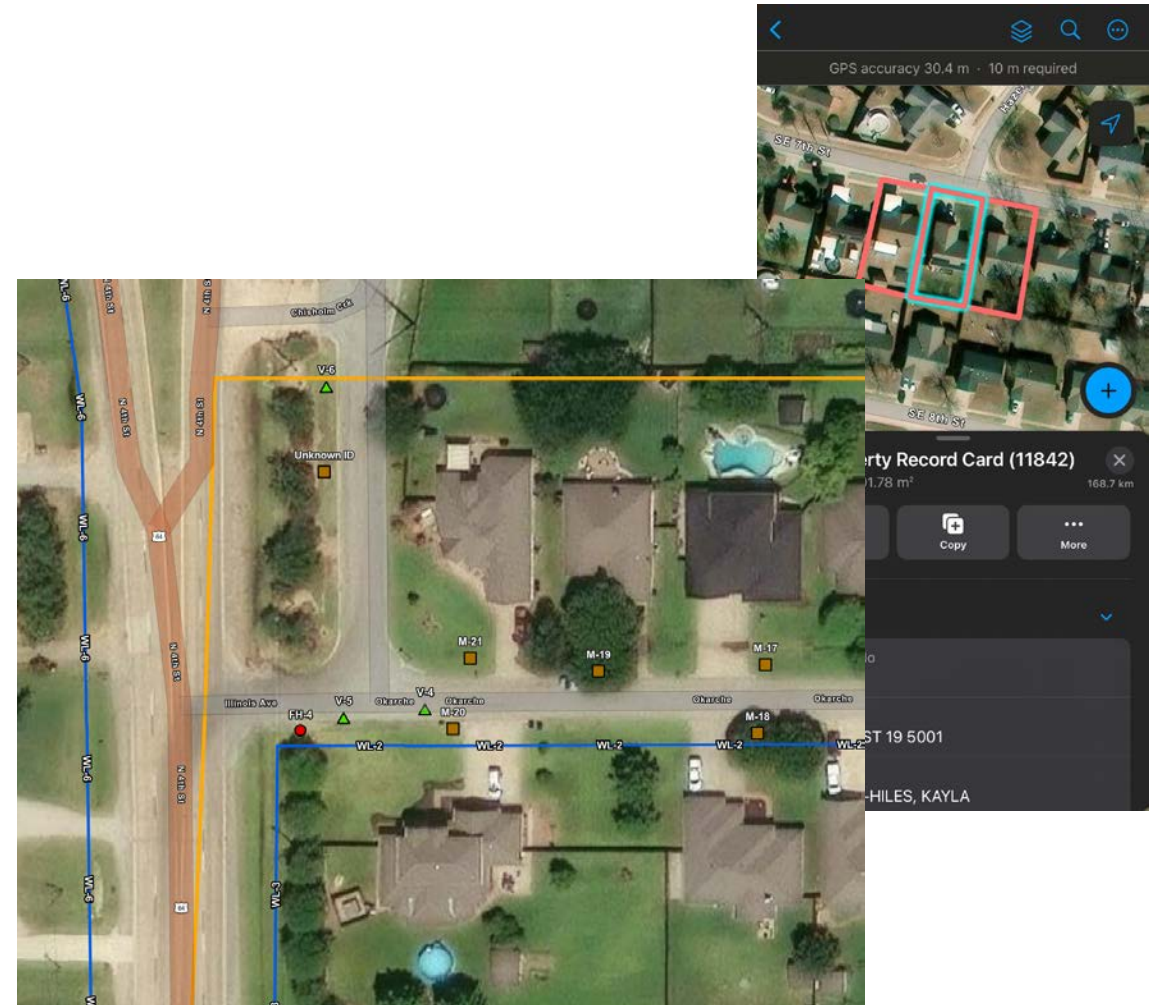
Community Engagement & Feedback



- Utilize S123 and maps
- Public can submit concerns
- Displayed in real time
- SORTPO Safety Concerns Map
- Nearly 1,000 responses, growing daily
- Multiple cities & towns now incorporating feedback data directly into their project planning
- Allows proactive management of emerging safety concerns or areas not previously identified
- Saves lives and property
- Creates feeling of ownership and being heard for members of the community

Field Data Collection

- Infrastructure Inventory
- Trash cans, water meters, hydrants, areas needing attention, etc.
- FEMA Disaster Relief data collection



What does it all mean?

- Our goal is to bring robust, industry standard GIS tools that are accessible and available even for extremely tight budgets
- Local expertise and support
- Makes planning and management operations quicker, easier, and less expensive

