

GAS UTILITY**User**

Gibson County Utility District, a natural gas distribution system in western Tennessee

Partner

GEO-Jobe, Esri partner since 2002, based in Nashville, Tennessee

Challenge

Overcome data errors and lengthy delays related to paper-based inspections

Solution

ArcGISSM Online, Collector for ArcGIS[®], Operations Dashboard for ArcGIS, custom GEO-Jobe widgets

Results

Streamlined inspections and more accurate decision making; greater safety and reduced risk for customers and operators

Smarter Inspections, Safer Network

Gibson County Utility District (GCUD) is responsible for the distribution of natural gas to 13,000 customers over a three-county area of western Tennessee. With 580 miles of total pipeline, GCUD is subject to regulation by various authorities to ensure network integrity and mitigate risks to public health. GCUD regularly conducts ongoing maintenance activities and inspections on assets to meet regulatory requirements and manage operations.

The Challenge

For several years, GCUD used a paper-based system for managing inspections and maintenance activities. Inspectors would use institutional knowledge to locate and navigate to assets in the field before recording their results on paper forms. Office personnel had to wait for the forms to come in and then attempt to transcribe the information on them. Due to the volume of records, there were significant delays in getting information to decision makers. Data errors related to incorrect or misplaced records were common. When audited by regulators, personnel would have to sift through stacks of forms to find asset and inspection information.

The Partner

GEO-Jobe is a geographic information system (GIS) consulting and technology firm based in Nashville, Tennessee. The company has been an Esri partner since 2002 and is focused on helping customers configure and extend ArcGIS Online. GEO-Jobe has assisted GCUD for several years with high-accuracy data collection and distribution system mapping. When GCUD asked for help with its inspection system, GEO-Jobe presented a focused solution built around ArcGIS Online.

"In my 33 years at GCUD, there have been many changes and improvements in the equipment and construction field. ArcGIS Online has to be the most outstanding tool we've ever implemented."

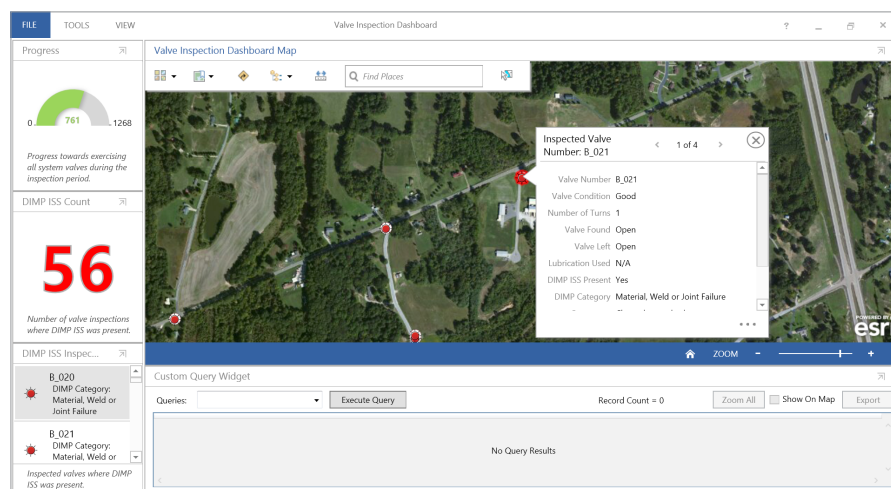
Randy Russom
GIS Analyst
Gibson County Utility District



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Understanding our world.



The Solution

After meeting with stakeholders throughout GCUD, Geo-Jobe determined that more efficient navigation, improved records management, and better communication with decision makers were key objectives for the project. GEO-Jobe helped GCUD implement an organizational account for ArcGIS Online, which served as the mapping platform and geospatial content management system for the new inspection solutions. Inspectors and engineers used Collector for ArcGIS on iPads to navigate to assets in the field. They digitally captured information and photographs that instantly synced with GCUD's enterprise GIS via ArcGIS Online. This information was displayed to GIS coordinators, engineers, and leaders through two configured views on Operations Dashboard for ArcGIS. Personnel could view live inspection information related to valves and regulator stations throughout GCUD's network. GEO-Jobe extended Operations Dashboard with custom query and reporting widgets that allowed GCUD to easily generate reports for regulators.

The Results

Inspectors spend less time navigating to assets in the field and can more easily capture and share data with office staff. Since field data is instantly reflected in the online system, information is more accurate and can be made available faster than ever before.

The customized Operations Dashboard provides decision makers with real-time information they can use to prioritize maintenance activities and address the overall health of the system. Multiple departments throughout GCUD, including Customer Service, Construction, and Measurement, all have access to the data stored in the system, improving customer service and coordination throughout the utility.

The increase in efficiency has led to dramatic cost savings for GCUD and improved regulatory compliance. Most importantly, the new inspection system has significantly improved the overall safety and health of the system and has reduced risk for customers and operators.

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