
MAKING UTILITY
CUSTOMERS
SUCCESSFUL
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# CONTENT



# Equipping the Modern Utility for a Changing World

The utility landscape is changing rapidly. Communities press to be more resilient and sustainable. As a result, their efforts impact all types of infrastructure. The context of location is pivotal to understanding these effects. Therefore, a geospatial approach to infrastructure management dramatically improves business results.

Location technology aligns infrastructure with human needs and the environment. When utilities see the whole picture, they anticipate problems and act more strategically. They understand relationships and predict outcomes based on science.

Water, electric and gas, and telecom providers deliver services that support healthy societies. To be effective, they must share information. They must collaborate as members of the community. Likewise, Esri and its partners deliver services and proven solutions. These technologies promote efficiency, situational awareness, and superb customer care.

This e-book demonstrates concrete improvements to infrastructure management. You will see many examples from your peer agencies. Read how they applied location-based technology across their organizations. Explore the improvements to asset management, operations, planning and engineering, customer care, and network management.

Business intelligence from Esri's ArcGIS® software leads to smart decisions in the moment and predictive abilities for the future.

# Asset Management

Today, utilities everywhere are modernizing their asset management systems so that they can meet the needs of the future. Mobile apps connect the field and the office to boost productivity, reduce errors, and save money. Data repositories using ArcGIS Utility Network increase asset performance. Throughout the agency, employees have full operational awareness for fast response and collaborative problem-solving. A complete geographic information system (GIS) fine-tunes asset management.

## Two Rivers Utilities Streamlines Water System Valve Processes

Two Rivers Utilities expedited its valve location and exercise processes by bringing GIS into the process. To ensure that valve location data was accurate, staff used Eos Positioning Systems' Arrow 100 Global Navigation Satellite System (GNSS) receiver. Staff welded the receiver to the arm of a water service trailer. While on-site, the receiver captures highly accurate valve coordinates and streams them as a file to Esri's ArcGIS Online, where it is stored as asset inventory data and is accessible for mapping.

This new process saves staff time in the field because they find valves faster than before. Now they have the time and technology to add new assets to the inventory map. With this geospatial data in GIS, the utility can quickly isolate sections of the system during an emergency.

Read the Two Rivers Utilities GIS Story

Connect with Eos Positioning Systems

## Cumberland Modernizes Asset Management with Field Data Collection Apps

To comply with federal and state consent decree regulations, the City of Cumberland, in Maryland, deployed an asset management program that helped it reach its goals and stay within its budget. A division of EBA Engineering, Inc., geographIT developed web applications for the city's water and wastewater asset management data and processes.

By replacing paper-based processes with GIS-enabled mobile apps, work crews now collect asset information that is more informative, accurate, and mappable. Because asset data is digitally collected and processed in GIS, managers can monitor asset performance via operations dashboards. This solution improved workflow efficiency.

Read the City of Cumberland GIS Story

Connect with EBA Engineering, Inc.

"GIS has helped the city to monitor, maintain, and improve our aging infrastructure in a fiscally responsible manner. By having real-time data on the state of our various assets, we are able to proactively meet the needs of our residents through improved planning efforts."

– Robert Smith, PE, City Engineer, City of Cumberland, Maryland

# Routing and Cost Analysis Tools Help FiberLight Locate Market Opportunities

Spanning the United States, fiber-optic infrastructure provider FiberLight, LLC, wanted to confirm that the company's financial costs and network use reports accurately reflected the actual network activity. FiberLight needs this essential information to find revenue opportunities and increase the scale of production. FiberLight relied on static spreadsheet data to evaluate activity and cost, but this method proved to be weak in revealing market potential.

FiberLight solved the problem by turning to 3-GIS, whose web-based service for fiber network design, Prospector, automatically calculates planning routes and produces cost estimates within minutes. Built using Esri ArcGIS technology, Prospector accesses geospatial data and uses multiple variables in its design models to build a complete view of network data in a geographic context.

ArcGIS documents the connectivity of fiber strands and generates accurate reports that comply with municipal requirements. Since deploying the 3-GIS solution, FiberLight has reconciled its inventory, cut time for permit applications, and reduced network construction costs.

Read the FiberLight GIS Story

Connect with 3-GIS

"With a constant focus on simplicity, FiberLight has made it our mission to drive reliability for businesses, improve reach for network solutions, and enable partners. We seek vendors, like 3-GIS, that ignite our strategies. Our culture of hustle allows us to respond better than anyone else in the industry, enabling higher touch relationships with lasting business value."

– Jay Anderson, Regional Vice President, Network Expansion, FiberLight


3-GIS

# WEC Energy Group Web Apps Weed Out Vegetation Inefficiencies

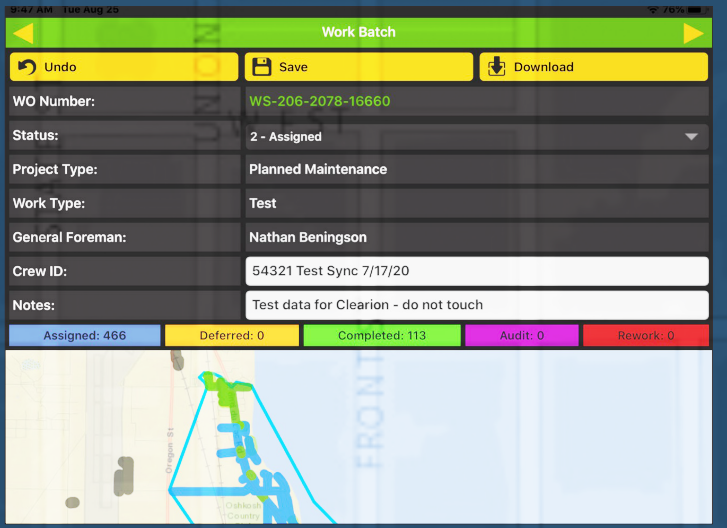
Esri IMGIS Conference 2020 Award Winner

Large electric companies that distribute power over thousands of miles of line need every advantage they can get in managing vegetation. To ensure reliability, compliance, and safety, We Energies and Wisconsin Public Service—part of WEC Energy Group—employ hundreds of utility and contractor personnel to manage more than 31,000 miles of distribution lines.

WEC Energy Group turned to Clearion software to transform the company's paper-based system into an efficient GIS-based system. Together the companies digitized vegetation management business processes from end to end so that they could be managed in ArcGIS.

WEC Energy Group eliminated paper-based workflows in the field and improved oversight of the vegetation management program. Task-focused web apps enhance the ability of field technicians to access and collect data, and of operation managers to track field operations in real time. Field crews access assignments on their mobile devices, navigate to asset locations, locate assets, capture their data, record and report task completions, and stream data to GIS.

Connect with Clearion





"With the implementation of the new technology, our planning staff have been able to work remotely and independently, which is necessary in today's world and more efficient. The Crew app has been accepted by staff of all generations due to its ease of use and increases the timeliness of reporting and communication."

– Dan Siewert, Wisconsin Public Service

CLEARION

# Hull Municipal Light's Efficiency Keeps Customers Happy

One way to keep electricity customers' rates low is to keep the utility's efficiency high.

Hull Municipal Light customers in Hull, Massachusetts, benefit from the utility's ArcGIS Pro implementation. Previously, the company used CADD files and stored its data in different databases, which made the system costly and inefficient. After the ArcGIS Pro implementation, management noted that decision-making, data governance, and field operations improved by 25 percent.

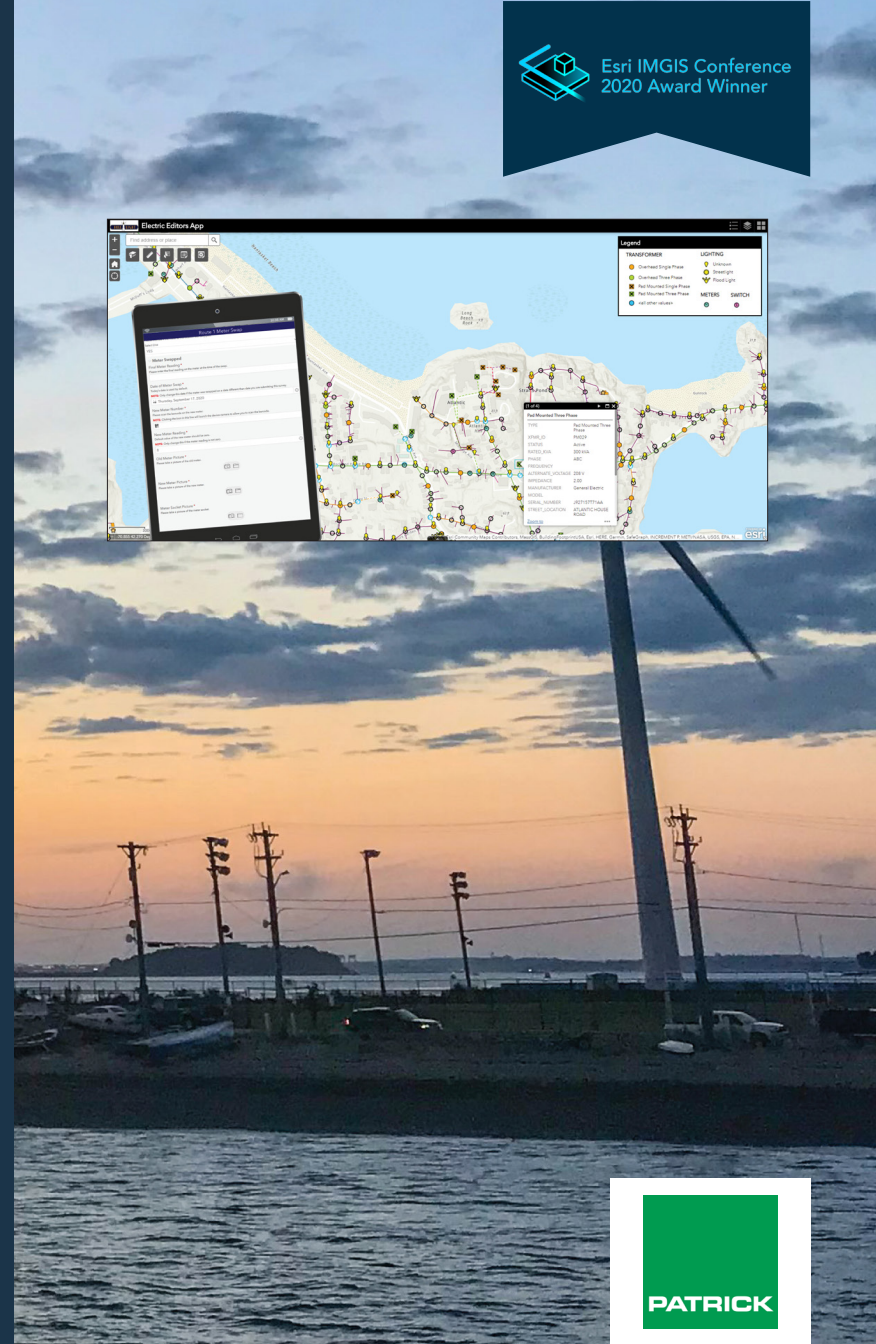
By making disparate data systems available in ArcGIS, staff could use a server portal to access information across the company. By bringing this data together, ArcGIS began to map services and assets to create a common operational picture.

To get to this point, Hull Municipal Light needed to migrate data and configure the system to do the tasks staff wanted. The company asked Patrick Engineering to assist with the transition to the ArcGIS platform. Patrick Engineering's expertise in digitally transforming electric companies proved instrumental in converting CADD files for ArcGIS, configuring apps for mobile use, and training staff to use the technology.

The outcome is that Hull Municipal Light staff can complete work faster and collect accurate data on-site. Furthermore, they have improved customer response times because they can get the data they need when they need it. These savings are passed on to customers.

Connect with Patrick Engineering

> "Patrick Engineering took the time with us to optimize the ArcGIS Survey123 application for workers in the field. Working out the fine details of the survey allows the mobile workers to be as efficient as possible. This streamlined survey will be very beneficial and add time savings to our AMI meter system deployment and future UN needs."
>
> – Michael Schmitt, Assistant Operations Manager, Hull Municipal Light



# Mobile App Adds Accuracy to Compliance Reports

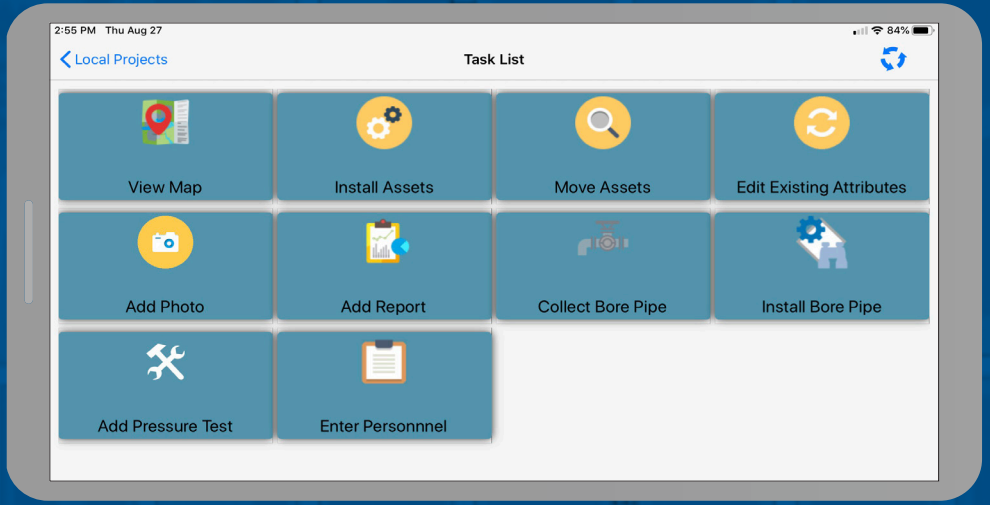
Compliance with the US Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations is driving gas companies to modernize their asset management systems. Peoples Natural Gas—a sizeable operation that provides gas to customers in three states—already used Esri ArcGIS technology to manage its services. Yet the company's GIS team knew it could get more out of the system.

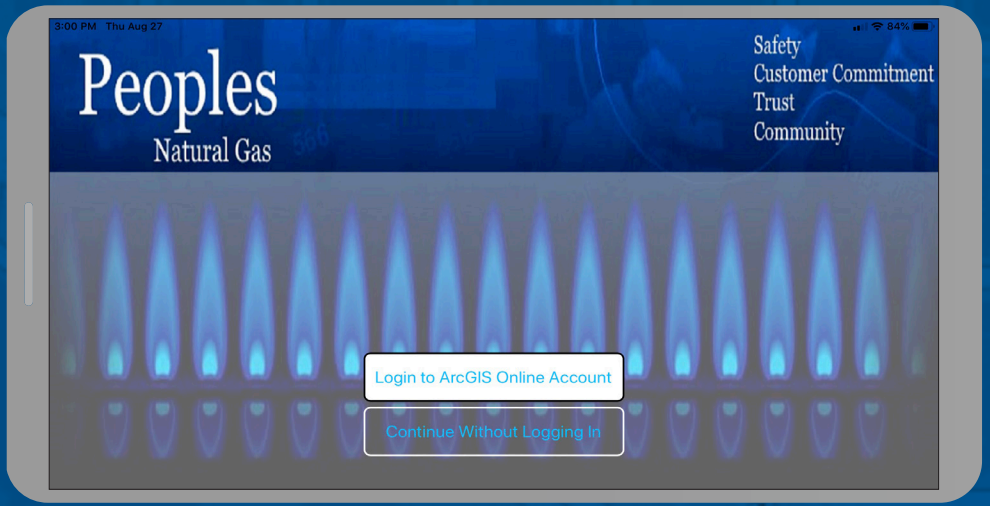
The team called on RAMTeCH to create a mobile solution for asset management. RAMTeCH developed an iOS app that scans asset bar codes and tags them with GPS coordinates. Using the mobile app to capture asset data, field technicians stream new asset construction information to GIS, which uses it to meet PHMSA regulations.

Connect with RAMTeCH

"Esri technology and mobile and data synchronization solutions developed by RAMTeCH have greatly improved the attribute and spatial accuracy of installed assets to enhance all future reporting and asset management needs. The intuitive user interface of the app has made training much easier."

– Scott Ewart, Peoples Natural Gas



# City's Telecom Asset Management System Delivers Pinpoint Accuracy

The City of Fargo required a solution for its fiber-optic utility network needs—specifically, developing a way to digitally splice the fiber cable and ultimately set up a fiber utility network. The company needed a solution that would work with Esri's ArcMap™ and ArcGIS Pro as well as incorporate Fargo's existing Cityworks asset management system. Was there a workflow that would enable staff to attribute each strand of fiber cable with data about its start, intersection, splice, and end points as well as the size and strand count of the fiber bundles? Ptarmigan Software answered yes.

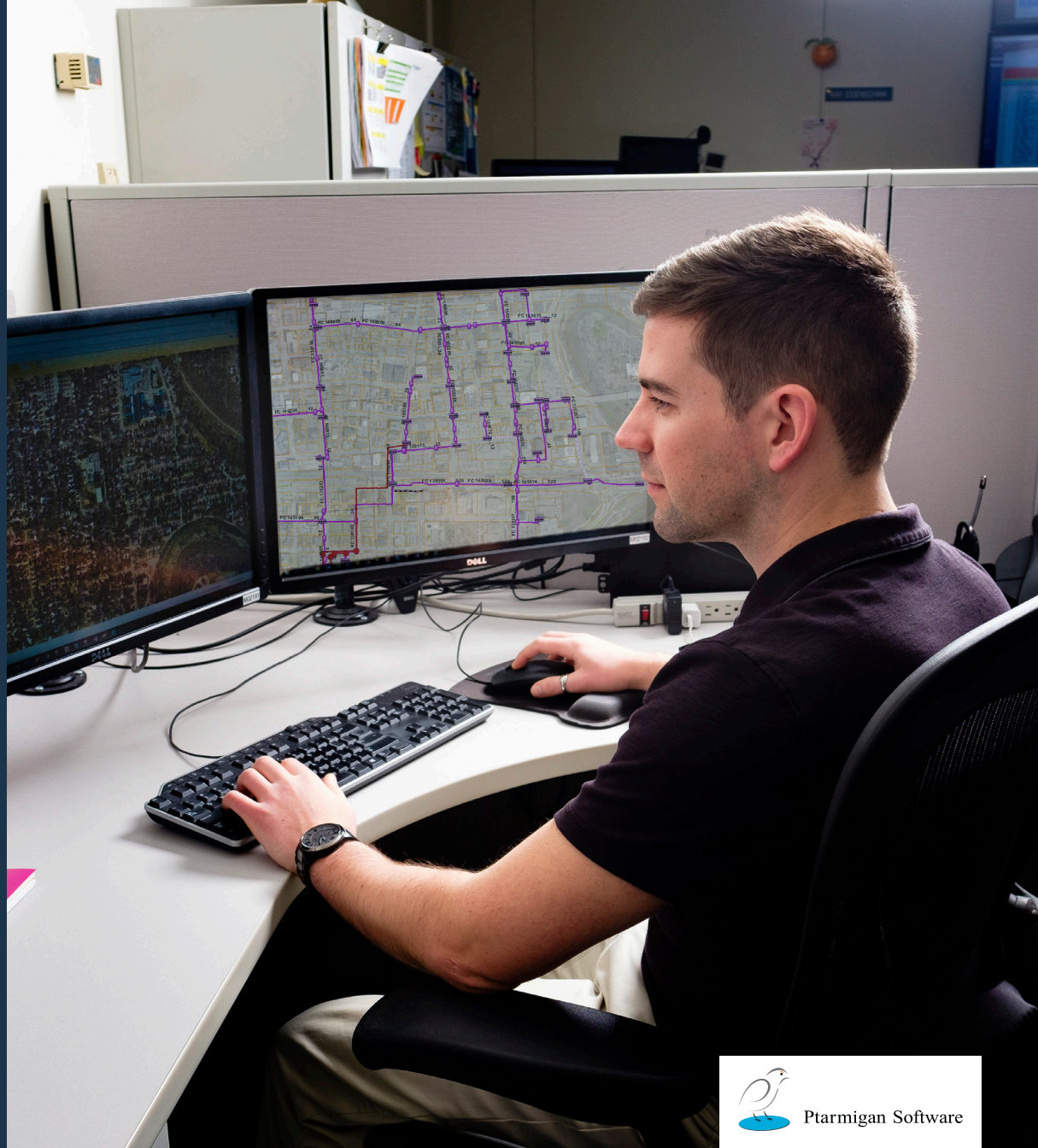
Ptarmigan performed the initial conversion to digitally splice the cables, which included 75 miles of fiber cable, by approaching the task intersection by intersection. Having done so, the City of Fargo immediately benefited from the transformation, saving staff hours of manually combing through splicing diagrams.

The GIS-enabled system can now trace an individual fiber strand from beginning to end, enabling staff to pinpoint breaks accurately. The system also reduces return trips to the office because staff, no matter where they are, now use mobile devices to trace fiber routes.

The City of Fargo has location-based insight to manage existing assets better and plan for the future.

Contact Ptarmigan Software

> "This solution is a real game changer for the City of Fargo. By leveraging geometric networks, the Ptarmigan software has provided the City of Fargo with a tool that can be used to manage existing assets and plan for the future."
>
> – Daryl Masten, GIS Manager, City of Fargo



Ptarmigan Software

# Operations

Situational awareness drives effective operational performance. System operators use GIS to model their networks and visualize data that shows the immediate state of the network. Moreover, they can see operations in a geospatial context, so they can locate resources, monitor status, and evaluate factors affecting performance. Operations dashboards show temporal data that reveals performance shifts. They are able to monitor field task status, track workforce locations, trace faults, and much more.

ArcGIS delivers comprehensive operational awareness.

## Mobile Apps Expedite Hydrant Inspections and Maintenance

The largest water company in New Mexico upgraded its operations system to significantly reduce hydrant inspection and maintenance time. By managing inspection workflows in GIS, Albuquerque Bernalillo County Water Utility Authority (ABCWUA) increases field operation efficiency. ArcGIS technology connects workflows and provides dashboards that deliver real-time operational awareness.

The water authority stores its historic data in an IBM Maximo enterprise asset management (EAM) system and integrates with Esri ArcGIS software. Having already moved much of its operations to digital processes, the authority was ready to bring its hydrant program on board. To do the work, ABCWUA turned to ActiveG, which is highly experienced in building spatially enabled business process workflows between ArcGIS and Maximo.

ActiveG configured an automated workflow that reads geospatial inspection data, evaluates results, and stores and categorizes data in Maximo. ActiveG's solution also evaluates inspection results, triggers maintenance work orders, and streams the information to ArcGIS Dashboards. Managers see the entire system on a map that shows information about hydrants that are inoperable, need work, or have passed inspection.

Inspectors from local fire departments digitally collect hydrant information, using a list of questions streamed to their devices. Once they complete the inspection at the site, they tap send and the information streams to the GIS with the tap of a button. When they finish the assignment, they bring up a task list to see where to go next.

The new hydrant inspection solution makes data accurate, prioritizes work orders, and creates maps of inspection information for analysis and taking decisive action.

Read the Albuquerque Bernalillo County Water Utility Authority GIS Story

Connect with ActiveG

## Santa Barbara Uses Precision Insight for Meter Replacement Program

To provide safe, reliable water services, the City of Santa Barbara needed to replace 27,500 aging water meters with new ones. Many of the meters had exceeded their effective life spans. Since the city was updating its assets, it also updated its data collection method.

The city added ArcGIS Online and ArcGIS Collector to its operations. Field techs tasked with replacing meters used the mobile app to see the assets map, capture information about replacement on-site, and instantly update the map.

In addition, the city paired an Arrow Gold GNSS receiver, from Eos Positioning Systems, with ArcGIS Collector to achieve centimeter-level accuracy. Santa Barbara now has a more efficient, real-time data collection workflow. The information collected improves system analysis, billing, and maintenance operations.

Read the City of Santa Barbara GIS Story

Connect with Eos Positioning Systems

Esri IMGIS Conference
2020 Award Winner

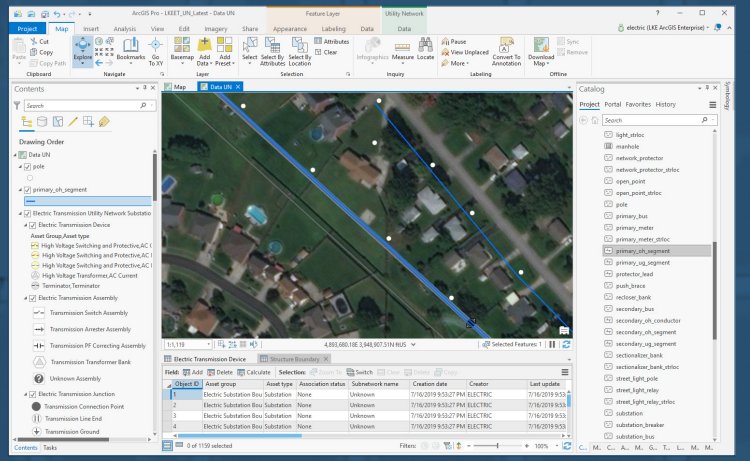
# System Integration Increases the Value of Data

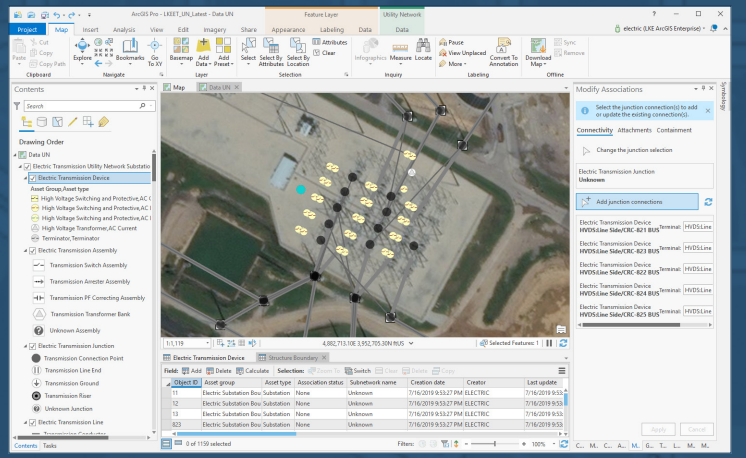
By integrating business and location data, power companies enrich operational data and create a more comprehensive picture of their network. This depth of information enables decision-makers to hone their strategies for delivering safe and affordable power to their customers.

The transmission groups at PPL's Louisville Gas and Electric Company and Kentucky Utilities Company implemented a map-based solution that integrated the companies' Transmission Energy Management System software, PLS-CADD, and their utilities data warehouse. SSP Innovations helped the companies resolve consulting, technical, and data challenges. It deployed Esri's ArcGIS Enterprise, which is foundational for a fully integrated system that supports centralized management.

SSP Innovations also configured the geodatabase using ArcGIS Utility Network, which models the schema of the utility network so that users can manipulate and view data. Staff can perform more in-depth analysis. For instance, using live tracing tools to approximate fault locations will provide greater insight about branch outages in future plans. The new system makes asset data more understandable and decision-making more informed.

Connect with SSP Innovations







ssp innovations

# Customer Engagement

Keeping customers notified about breaks in service improves customer satisfaction. Customers use interactive maps to engage directly with utilities, providing feedback and insights that help direct planning. Keep customer communications open with digital survey apps, interactive maps, and ArcGIS StoryMaps℠ stories.

## Customer Notification System Saves Hours and Dollars

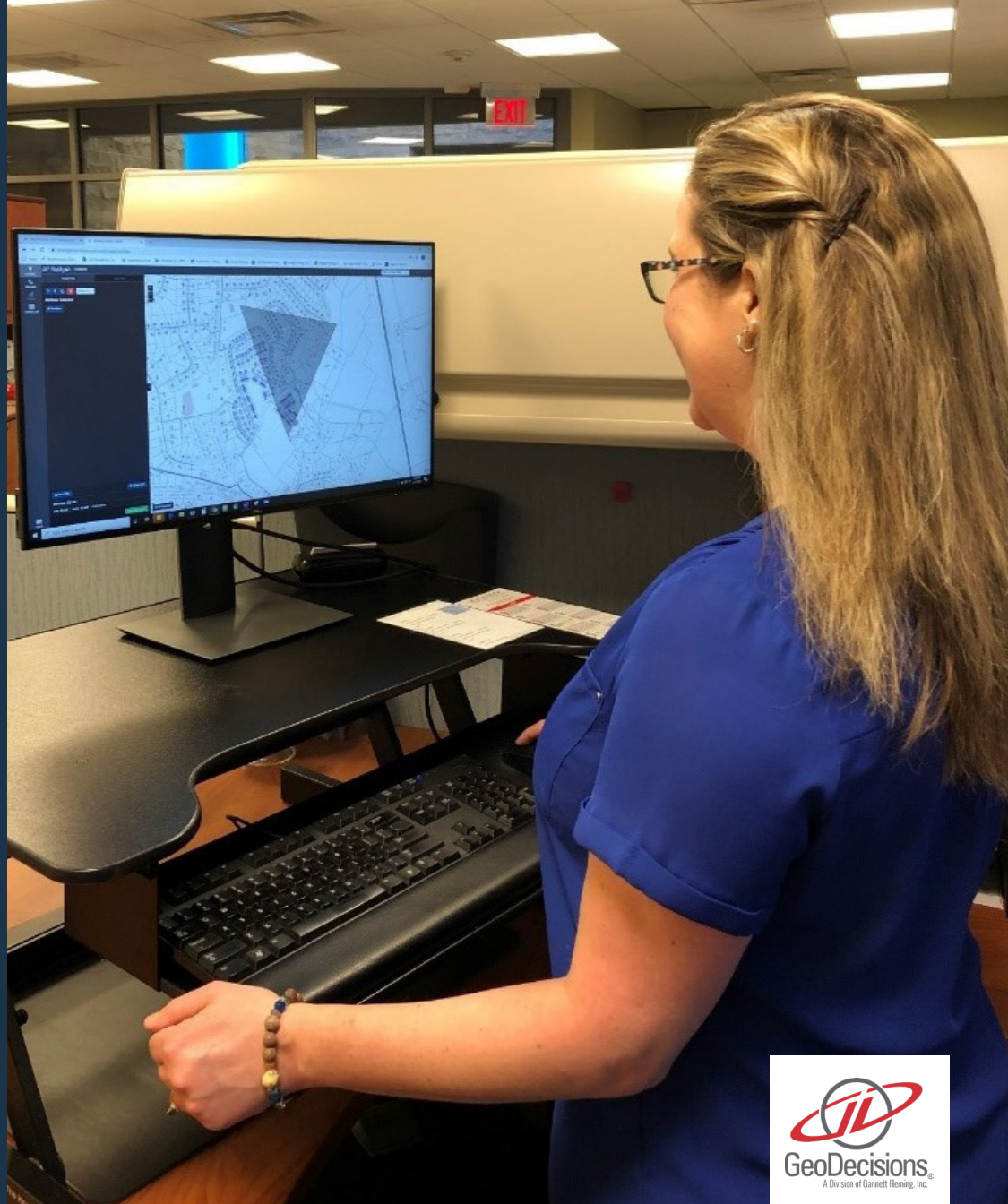
Notifying customers about water shutoffs can be time-consuming. When Lehigh County Authority (LCA) moved its water notification system into GIS, it eliminated almost 800 hours of wasted time annually.

The public water and wastewater utility extended the capabilities of its ArcGIS implementation by integrating it with GeoDecisions' Notify system, enabling high-speed, mass notification. This web-based solution leverages existing customer, employee, and GIS mapping data to distribute important information quickly.

By adding Notify to GIS, LCA has improved its entire workflow including driving to and from the office, locating and mapping affected customers, and notifying them. Moreover, the authority now uses Notify as its primary customer and employee communications platform. LCA estimates that the system saves the utility $100,000 per year.

Read the Lehigh County Authority GIS Story

Connect with GeoDecisions



## Colorado Water Company's Apps Build Transparency

Parker Water and Sanitation District (PWSD) serves a rapidly growing community southwest of Denver, Colorado. To meet sustainability goals, PWSD added a state-of-the-art water treatment facility to the utility's system. Customers wanted to know about the project and its status, so PWSD deployed GIS web apps to keep customers informed.

Using ArcGIS technology, PWSD developed online apps that showed customers the latest information, via descriptions and interactive maps, and allowed them to give their feedback. PWSD published maps about hydrant flushing by subdivision, showcased capital improvement projects including infrastructure upgrades and system replacements, and reported water quality sampling outcomes.

To meet its objectives of being an inclusive and welcoming water service, PWSD continues to explore ways to use GIS to increase transparency and encourage customer engagement.

Read the Parker Water and Sanitation District GIS Story

Learn about ArcGIS Web AppBuilder

# Planning and Engineering

Engineers use geospatial data, modeling, and analytics to optimize infrastructure planning. Prediction tools show where a proposed project will have vulnerabilities and rate their risks. Prioritization tools allow planners to schedule project phases. Some companies use ArcGIS to create 3D digital twins of their entire network so that they can easily see performance trends and patterns by location and use predicted population growth to estimate future demand.

## Real-Time Status Updates Keep Inspection Program on Track

If project status is not efficiently communicated to other departments, workflows can be delayed. The Municipal Authority of Westmoreland County (MAWC) implemented a work tracking system that connects workflows and keeps the utility's hydrant activation and inspection tasks on time.

The MAWC tech team worked with geographIT, a division of EBA Engineering, Inc., to create an efficient workflow process. Using ArcGIS Web AppBuilder, the team created mobile apps for crews to perform in-field inspections, collect asset data, and report work status. The apps streamed data, which generated real-time maps and graphs that staff viewed on customized operations dashboards.

Users can see the status of any of the 16 phases of construction workflow. For instance, inspection crews can use the as-built map app to locate new assets and mark them as active. Changes immediately appear on the dashboard. The system instantly moves the project to the next work phase. Staff throughout the utility see the current status for every phase in the process.

Now, internal project status reports are created in minutes, and management has a high level of confidence in data accuracy. The outcome is a 20 percent decrease in inspection task time. At the present rate of task completion, MAWC calculates that it will easily meet its goal of completing 8,500 hydrant inspections every two years.

Read the Municipal Authority of Westmoreland County GIS Story

Connect with EBA Engineering Inc.

> "Having a well-planned GIS is essential to providing a common operating picture that empowers both end users and management to do more while keeping projects on task and status communicated."
>
> – Anthony Pologruto, MAWC

## Engineers Migrate CAD into GIS to Improve Network Awareness

Engineering staff frequently use CAD systems to run water modeling scenarios, update network maps, and perform network analysis. The San Juan Water District (SJWD) engineering department migrated its CAD system into an advanced GIS, which drastically improved office communication and network awareness.

The utility decided to use ArcGIS technology and enlist Esri partner HDR to help with the transition. HDR has extensive engineering experience and expertise in asset management and hydraulic modeling. SJWD and HDR worked together to migrate the CAD system to an enterprise data repository modeled with Esri's ArcGIS Utility Network so that the data could be viewed and manipulated in GIS.

Engineering staff use the new centralized data repository to share data across the enterprise. Web maps and operational dashboards are a fast means for other staff to see project details and status, view service requests, and more. An added benefit is the system's portal through which different groups access information and apps specifically designed for their needs.

The utility's new Esri GIS implementation has increased the district's operational performance and increased efficiencies in the field for maintenance and fast response.

Read the San Juan Water District GIS Story

Connect with HDR

## Data Migration Tools Streamline Telecom Expansion Project

Housing developments are booming in Troy, Ohio, and added customers were taxing the local telecom provider's services. Needing to expand its network, Imagine Networks seized the opportunity to implement GIS in planning the build-out and improving operational performance.

Millennium Geospatial helped the telecom company implement ArcGIS Pro and ArcGIS Utility Network, which enabled Imagine Networks to deploy a high-level centralized split network to serve three new subdivisions. The new system provided planners with a single point of communication and consultation for guiding the entire process, delivering clear data, and generating maps.

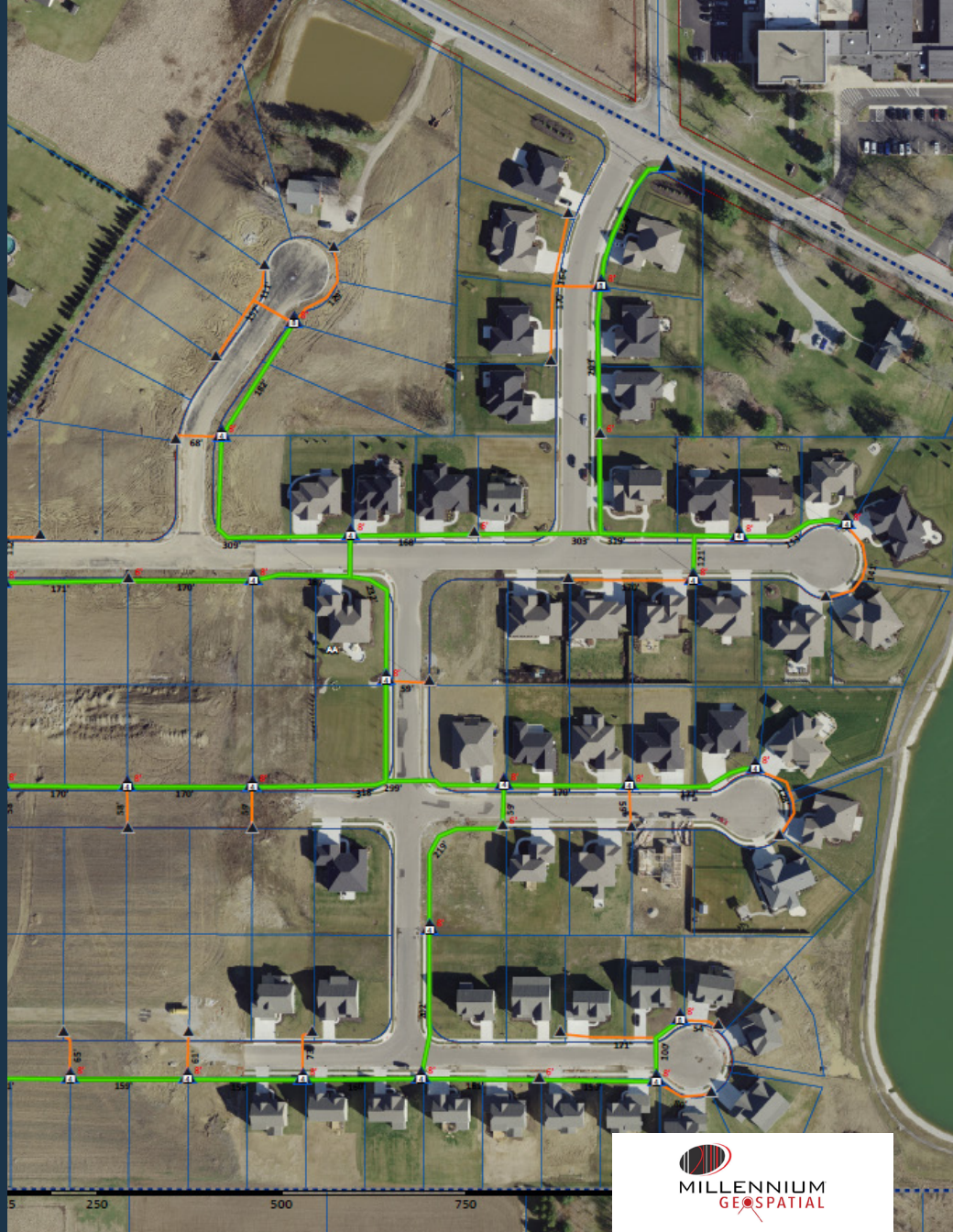
Imagine Networks used the platform to design an accurate network, manage updates from field crews, and collaborate with key stakeholders as it built a higher-speed network for its customers.

Read the Imagine Networks GIS Story

Connect with Millennium Geospatial

"It was most refreshing to have an engineering plan of the network down to the foot. All Imagine Networks had to do was the mobile work based on its well-designed routes and great choice in product."

– Josh Luthman, President, Imagine Networks



# Mapping Bar-Coded Data Fine-Tunes Meter Replacement Project

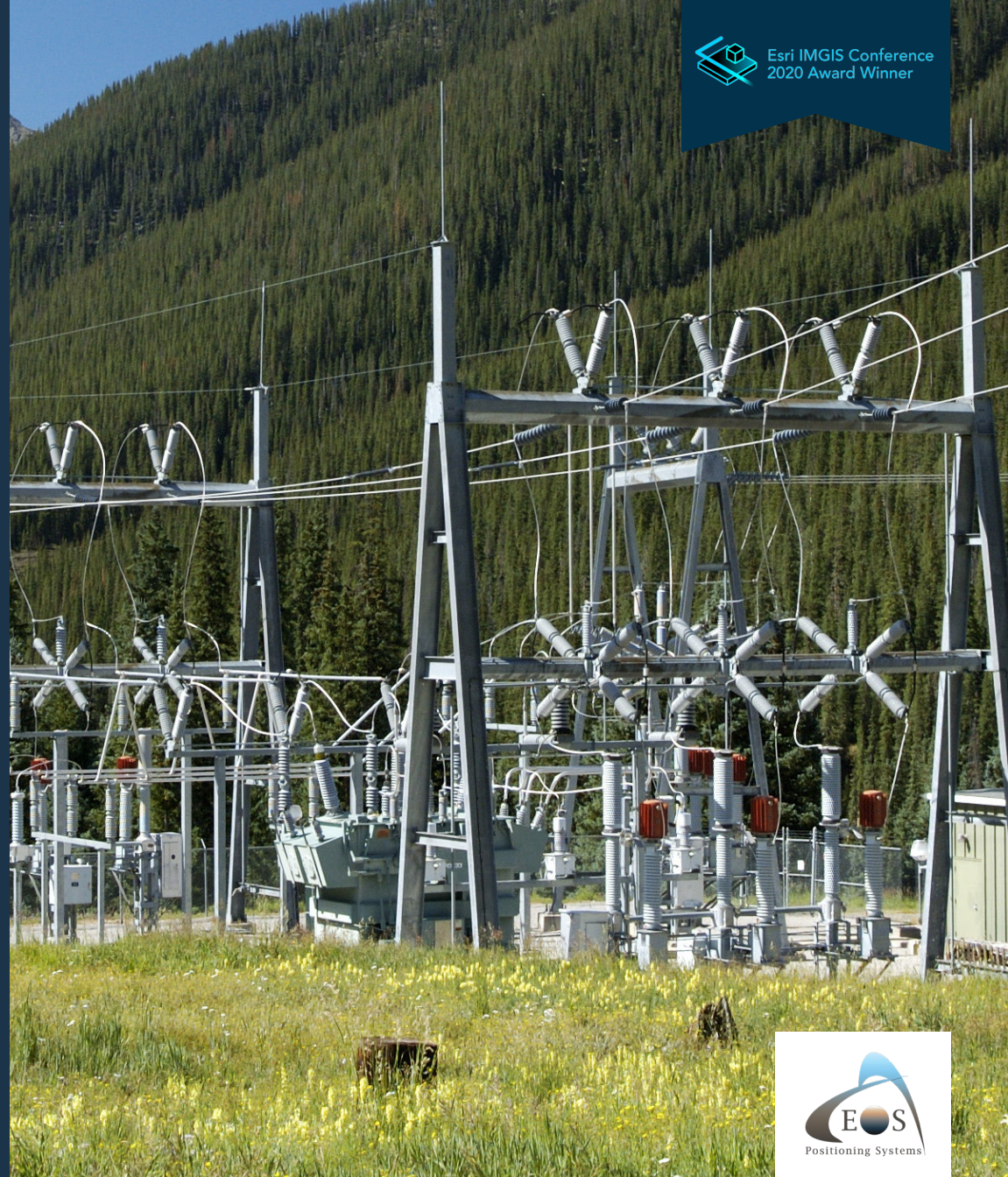
Bar coding is becoming a commonplace method for collecting and storing data. In-field data collector apps have been adapted to include bar codes. Three years ago, AltaGas Utilities began including bar codes on its assets to proactively comply with Canadian regulations.

Esri updated ArcGIS Collector to capture bar codes and decode them in the field. The mobile app relies on GPS receivers to capture location coordinates. AltaGas Utilities uses Eos Positioning Systems' Arrow Gold GNSS receiver because it integrates with ArcGIS and provides centimeter-level accuracy. What's more, Arrow Gold was the only receiver tested that could stand up to Canada's harsh environment.

AltaGas Utilities rolled out the bar code data collection system to 50 contractors and employees. Data streams from the field to the office's implementation of ArcGIS Pro. It automatically decodes the collected bar codes and feeds the data into the ArcGIS Utility Network database, which drives the utility's tracking and traceability system. The system saves 50 percent of inspection field time.

Read the AltaGas Utilities GIS Story

Connect with Eos Positioning Systems



# Data Migration Tools Expedite Network GIS Implementation

Working toward a sustainable future, the Norwegian electric company Lyse Elnett is implementing a new system that is more efficient and delivers greater intelligence. It will integrate enterprise resource planning (ERP) with ArcGIS to build geospatial awareness throughout the company.

The implementation began with a full migration from the geometric network system to ArcGIS Utility Network. Lyse wanted the migration process to go smoothly and ensure that data remained secure, retained consistency, and wouldn't be lost. The company accomplished this using the Similix Utility Network Migration Suite from Similix ApS. This complete migration toolbox was specifically designed for migrating a given data model into the Esri ArcGIS Utility Network data model.

The implementation project has yet to be completed, but Lyse's expectations include the following:

- The integration of the ERP system and the Utility Network data model for asset maintenance work order and project information
- The integration of branch versioning, extract changes service, and query service filtering functionality
- Spatial analytics and visualization capabilities via web and mobile apps
- Generation of web map information products

Connect with Similix ApS

"The Utility Network technology with an open common data model (UNC) will drive our business forward. It will be the central platform for design and managing the life-span of the electrical grid including new distributed energy sources and smart devices."

– Sigve Hamran, GIS Manager, Lyse Elnett

# Design Team Boosts Accuracy and Production

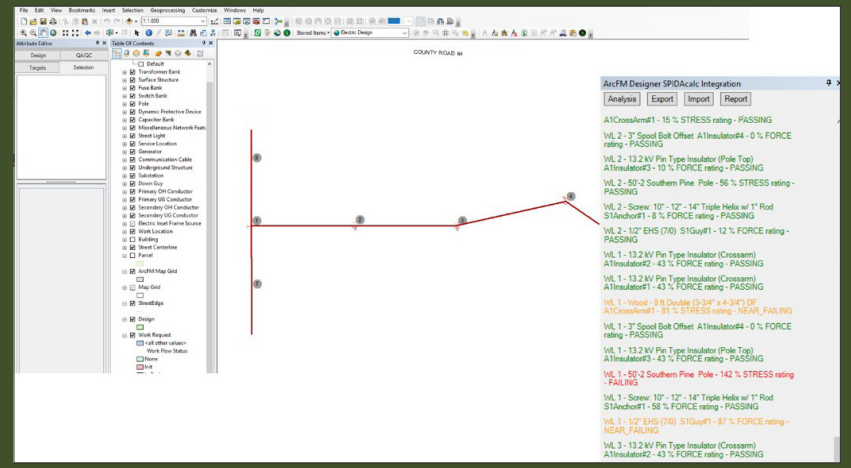
Ameren Services designers and engineers automated their workflows and are saving time and improving data accuracy. The Illinois electric company had outgrown its CAD system, needing to meet the demands of 2.4 million customers. It was time to modernize Ameren's design system.

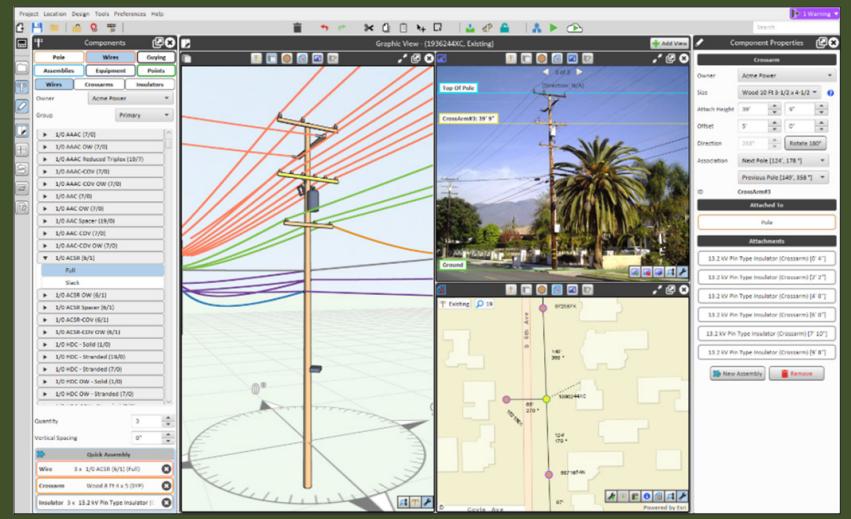
Since it was already using ArcGIS as a system of record, Ameren asked Schneider Electric's GIS professional service team to implement ArcFM and ArcFM Designer. These solutions contain a suite of utility tools and applications that support asset management and graphic work design, which include version control, reconciliation, approval, and posting functionality.

The implementation also integrated SPIDAcalc, a cloud-based analysis engine, which provides analysis, export/import, and reporting functions.

Designers are now producing a larger volume of high-quality, accurate designs.

Connect with Schneider Electric





"Ameren is looking forward to implementing the integration between ArcFM Designer and SPIDAcalc to take advantage of a streamlined design process. Moving away from homegrown spreadsheets to a fully 3D tool to analyze distribution line designs will be a big step forward."

– Patrick Barud, Supervising Engineer, Ameren Illinois



Schneider Electric

# Network Management

All companies need to ensure that their business values remain relevant to societal needs. For utilities, this means adopting innovations that continually improve safe working environments, deliver reliable services, and maintain a focus on customer support. Since all utility activities are anchored to the network, this is where forward-thinking companies focus their efforts.

## SEMCO ENERGY Looks to the Future

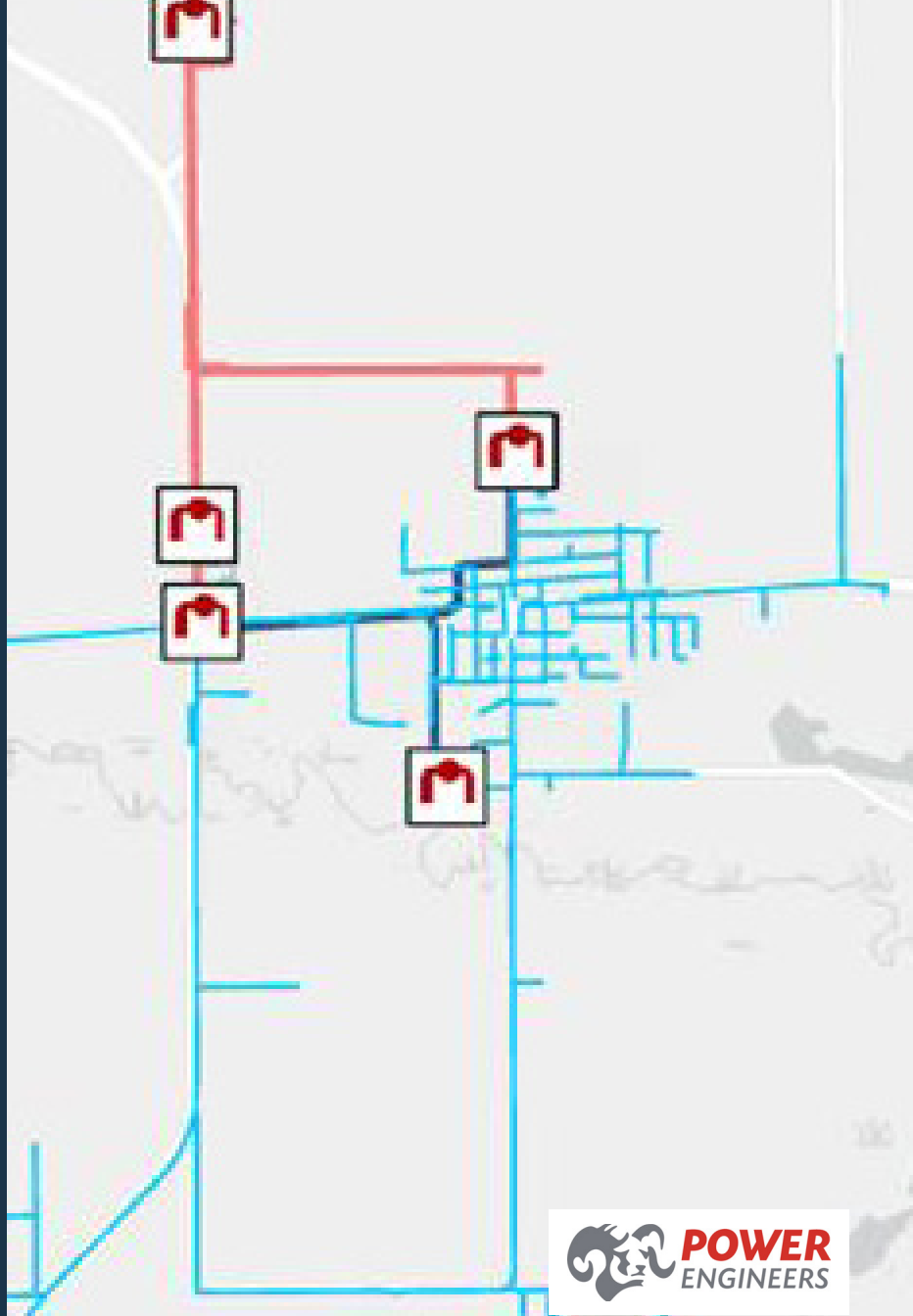
SEMCO ENERGY Gas Company was looking for a low-risk and cost-effective way to assess the utility's existing data while gaining valuable insight. With customer satisfaction in mind, it was important that SEMCO build and implement a data model that would support its GIS growth for the next decade. A long-standing Esri customer with a highly experienced and knowledgeable GIS team, SEMCO decided to take advantage of the early adopter program for Esri's Utility and Pipeline Data Model (UPDM) and ArcGIS Utility Network.

Partnering with POWER Engineers, Incorporated, a customized and comprehensive plan was developed that detailed scheduling and the level of effort necessary to prepare for a full conversion of SEMCO's data to Utility Network. With Utility Network, SEMCO will have the ability to use advanced traceability within pressure subnetworks, allowing staff to make faster decisions that will increase quality of service to the utility's customers.

Learn More about POWER Engineers

"This project is consistent with our history of research, analysis, and learning to gain insight into GIS technology. In 2006, SEMCO was presented an Esri SAG Award, for this due diligence approach to projects. We're pleased with the outcome of our readiness assessment with POWER's team. The staff we worked with demonstrated POWER's shared desire for high customer satisfaction, and we are moving forward with our current full UN migration with POWER."

– Scott Torello, Utility Network Project Lead, SEMCO



## Enhanced Connectivity Provides Benefits to Provo City

Pressure zones, watershed areas, and sewer management areas are all included in Provo City's comprehensive plan. Including them has always been a very labor-intensive and time-consuming task. Because many of the processes completed for the plan are also tied to permitting or regulatory processes, it is especially important that the data is accurate; otherwise it can lead to slow and costly audits.

Already utilizing Esri's ArcGIS Enterprise on the geometric network, Provo saw how it could greatly benefit by upgrading to Esri's ArcGIS Utility Network. POWER Engineers, Incorporated, was selected to help with the upgrade. A full conversion and implementation of the core Utility Network model for water, wastewater, and stormwater was done. The move to Utility Network is allowing Provo to achieve more accurate modeling and automated data validation. It provides service-level data access and puts accurate data into the hands of more users at all levels within the organization. As Provo City government is a data-driven organization, Utility Network has made a tremendous difference.

Read the Provo City Case Study

Connect with POWER Engineers

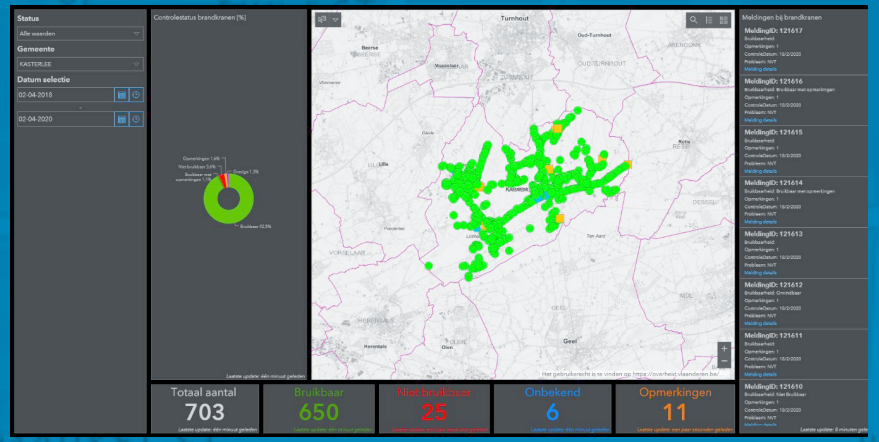
## ArcGIS Utility Network Replaces Inefficient Workflows

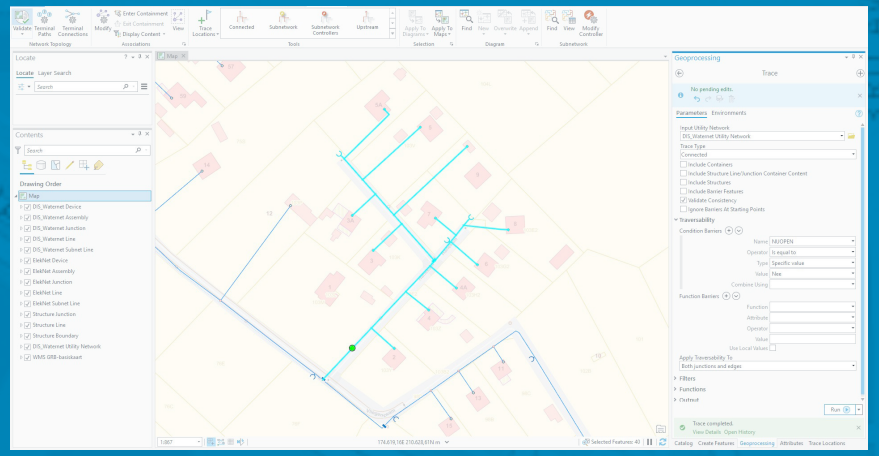
Pidpa, one of the largest water companies in Belgium, serves more than 1.2 million people. Staff use ArcGIS to manage a system that still relies on paper-based workflows in the field. Knowing that a fully implemented GIS would benefit the organization, Pidpa turned to Tensing consultants to help the water company transition to digital collection of field data, increase system analytics, and replace custom applications.

Tensing helped Pidpa with a migration to Esri's ArcGIS Utility Network, as it would bring the organization more possibilities for further integration of GIS. Utility Network provided the ability to replace custom applications, use advanced analytics, and access system information in the field.

Read the Pidpa GIS Story

Connect with Tensing



"Both parties learn from each other. Thanks to Tensing consultants, who are realizing solutions on our ArcGIS implementation at a rapid pace, Pidpa has a future-proof GIS solution in-house. We look forward to the next steps in our collaboration to further broaden and optimize the use of GIS within Pidpa. The point of departure here is that new techniques can be used by everyone and directly add value to the organization and processes."

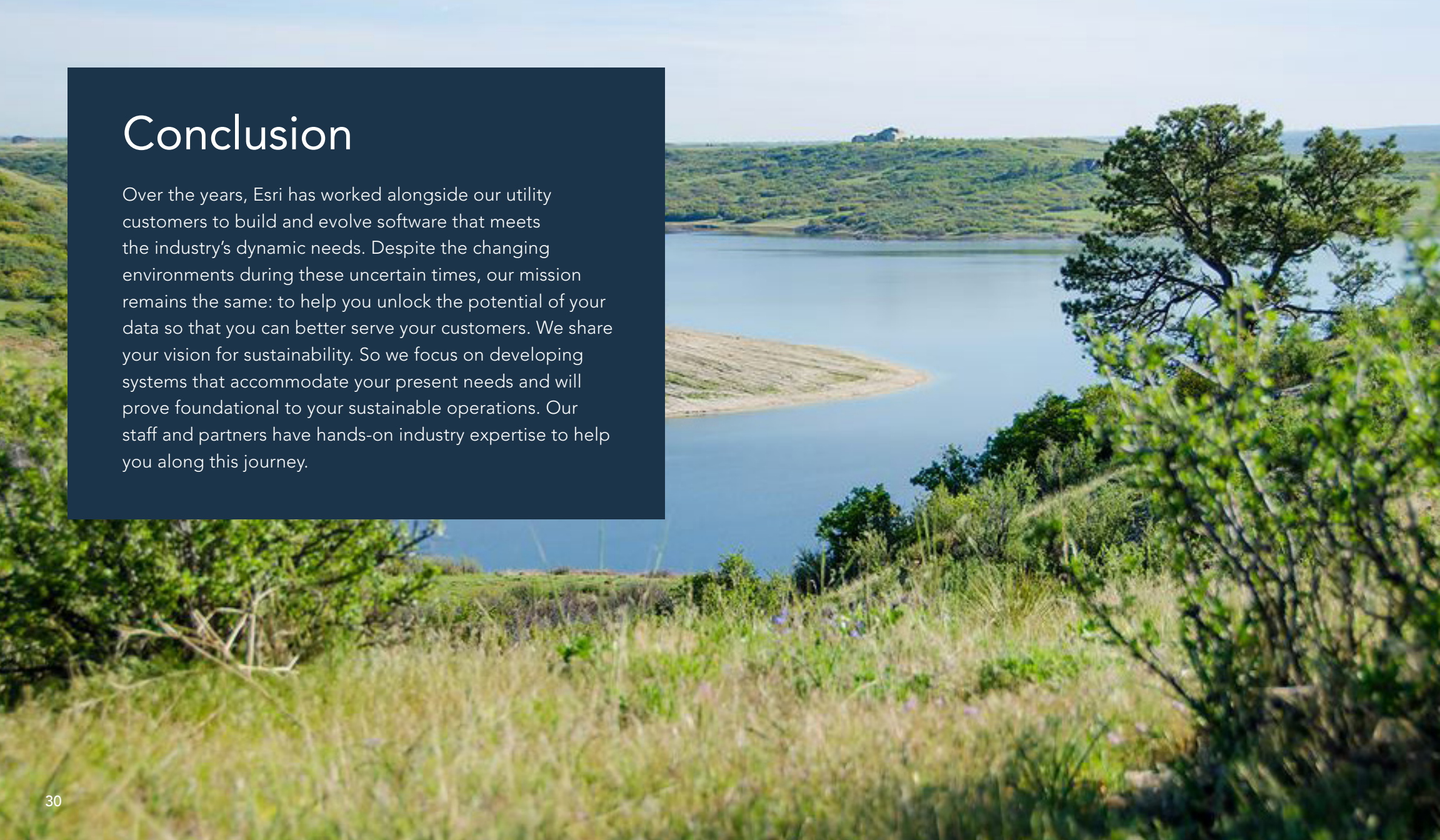
– Bart Reynaert, Manager, GIS and Asset Applications, Pidpa



tensing an AVINEON company

# Conclusion

Over the years, Esri has worked alongside our utility customers to build and evolve software that meets the industry's dynamic needs. Despite the changing environments during these uncertain times, our mission remains the same: to help you unlock the potential of your data so that you can better serve your customers. We share your vision for sustainability. So we focus on developing systems that accommodate your present needs and will prove foundational to your sustainable operations. Our staff and partners have hands-on industry expertise to help you along this journey.



# Thanks to Our Partners

Consider Esri partners when you want to accelerate ArcGIS implementations, customize solutions, or fine-tune your systems.

## About Esri

Esri, the global market leader in geographic information system (GIS) software, location intelligence, and mapping, helps customers unlock the full potential of data to improve operational and business results. Founded in 1969 in Redlands, California, USA, Esri software is deployed in more than 350,000 organizations globally and in over 200,000 institutions in the Americas, Asia and the Pacific, Europe, Africa, and the Middle East. Esri has partners and local distributors in over 100 countries on six continents, including Fortune 500 companies, government agencies, nonprofits, and universities. With its pioneering commitment to geospatial information technology, Esri engineers the most innovative solutions for digital transformation, the Internet of Things (IoT), and advanced analytics

**Visit us at esri.com.**

## Contact Esri


380 New York Street
Redlands, California
92373-8100 USA

1 800 447 9778
T 909 793 2853
F 909 793 5953

info@esri.com
esri.com

Offices worldwide
esri.com/locations



Visit us at esri.com.

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