

# SERVICE FEATURE

# Enhancing Utility Operations With GIS-Centric Enterprise Asset Management Systems

Geographic information system (GIS)-centric enterprise asset management (EAM) systems are increasingly being adopted by utilities to enhance decision-making, improve operational efficiency and optimize customer service. Providing valuable insights, these systems integrate geospatial data into utility operations to improve asset management, reduce costs and streamline service delivery.



By leveraging GIS and spatial analytics, utilities can gain a comprehensive understanding of their assets. GIS also supports better planning, predictive maintenance and resource allocation, leading to more efficient operations and greater overall effectiveness.

# What 1898 & Co. Does

# • Spatial Visualization

GIS allows utilities to view assets on interactive maps, providing context that enhances understanding of asset locations, relationships and spatial patterns. This visualization helps utilities make informed decisions about deployment, predictive maintenance and long-term planning.

#### • Data Integration

By integrating asset data with other geospatial information (e.g., zoning, environmental factors), utilities gain a comprehensive view. This integration informs decision-making by providing context of surrounding conditions, such as land use or climate risks.

# Life Cycle Management

GIS tracks assets through their entire life cycle, from acquisition to decommissioning. This enables utilities to forecast asset needs, prioritize replacements and optimize budgeting based on detailed asset data, reducing unplanned expenses.

Condition Monitoring

With real-time data from remote sensors and GIS, utilities can monitor asset health and performance, allowing for immediate action to prevent failures. This proactive approach reduces downtime and extends asset life.

#### Predictive Maintenance

GIS-enabled spatial analysis identifies failure patterns based on location and environmental factors, enabling utilities to implement predictive maintenance strategies.

#### Efficient Resource Allocation

GIS helps utilities optimize resource use by pinpointing when and where assets require attention. This targeted approach

maximizes the efficiency of staffing, equipment and materials, leading to cost savings, reduced downtime, and maintenance of compliance.

# Environmental Impact Assessment

GIS overlays asset locations with environmental data, helping utilities assess and minimize potential impacts on sensitive areas like wetlands or flood zones.

## Public Engagement

Many GIS platforms allow utilities to share important information, such as outage maps and project updates, with the public. This transparency improves customer relations and fosters trust in the utility's services.

## Scalable Solutions

GIS systems can grow with a utility, easily accommodating new assets, regions or more complex analyses. Whether managing a small network or expanding across new territories, the GIS platform supports scalable and customized solutions.

## • Risk Analysis

GIS enables spatial risk assessments by analyzing factors like flood zones, seismic activity and fire risks relative to asset locations. This helps utilities take proactive measures to safeguard infrastructure and enables quicker reaction time in the event of a disaster response or outage. By integrating GIS into utilities' EAM systems, 1898 & Co. helps the utilities make smarter decisions to deliver superior service cost-effectively. Our tailored GIS solutions optimize asset management across the entire life cycle, helping see that your operations are efficient, compliant and future-ready. Our team is ready to help you unlock the full potential of geospatial data to enhance your utility's performance.

# About 1898 & Co.



1898 & Co. is a business, technology and cybersecurity consulting firm serving the industries that keep our world in motion. As part of Burns & McDonnell, our consultants leverage global experience in critical infrastructure

assets to innovate practical solutions grounded in your operational realities. For more information, visit **1898andCo.com**.