![1898 & Co. — PART OF BURNS & McDONNELL]

Planning for the ArcGIS Utility Network

Migrating to a new data format may not seem urgent to your organization today. In fact, the idea could be worrying. But planning ahead and getting a realistic picture of how large the migration task will be can effectively diminish those concerns.

Esri, the leader in GIS mapping and spatial data analytics, has announced it is focusing its software development efforts on the ArcGIS Utility Network, moving away from the Geometric Network, a data structure with nearly 20 years of use among utilities. The ArcGIS Utility Network provides advanced functionality for managing, using and analyzing GIS information for multiple utility types. An initial release of the Utility Network in early 2018 marked a fundamental shift in utility data management and usage.

Migrating to this new structure will take planning. If you're a utility, it's likely your organization already has data stored and organized in GIS, possibly in a Geometric Network. A readiness assessment will develop a road map for your migration. Proactive planning will help your organization leverage the full potential of Esri's Utility Network.

Utility Network Readiness Assessments

System Architecture Review
To begin an assessment, your GIS system should be reviewed to better understand your existing data model and your current system design.

Data Quality Assessment
The system architecture review is followed by a review of your data. During this second step, the quality of your GIS data should be assessed to determine how ready your data is for migration. Assessing your data using standardized checks and routines enables recognition of data issues that will impact the migration.

Data Model Review
A data model review will assess how to most effectively fit your existing data into the new data structure. The goal is to retain all important information while setting up your organization for future success with the new model.

The Utility Network offers a variety of ways to more accurately model real-world infrastructure in the GIS. During the data model review, opportunities are identified to leverage the new containment capabilities to allow you to model areas in your system that have many assets in relatively small areas. These steps build out a new model that works directly for your organization's needs, providing the framework necessary to perform work.

Pilot Area Data Migration

To help identify issues that may occur during a migration project, our readiness assessments include a migration of a representative subset of an organization's data. Knowing how the change will impact the editing and QA/QC process of the organization is vital. Reviews of your GIS businesses will provide recommendations for managing change related to the migration.

ArcGIS Utility Network Benefits

According to Esri, the Utility Network data model:

- Works with a high-performing model that is scalable to large utilities.
- Models how components of your system are connected.
- Represents dense areas of your system without map clutter.
- Models significant components of your system.
- Enforces data integrity and reduces data entry errors.
- Enables advanced analysis of your network.

Services Provided

- Sandbox environment setup and client access
- Data model review
- Data quality assessment
- Pilot area data migration
- Data editing workflow review
- Third-party system integration assessment

Systems Integration Assessment

A review of your organization's GIS system integrations will help you understand the level of effort needed for updating your GIS integrations to work with the Utility Network.

Access to Sandbox Environment

Temporary access to a sandbox ArcGIS Enterprise environment is provided so that your organization can see and interact with its data in a Utility Network.

How We Can Help

Our team partners with Esri to help you through any steps as required. By the end of the assessment, your organization will understand the strategic planning necessary to proactively budget for migration to the Utility Network model.

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**