

Colorado Springs Utilities

GIS solution offers improved efficiencies and flexibility



PROJECT AT A GLANCE

Project Type

Operational utility solutions

Location

Colorado Springs, CO

Number of Customers

225,000

Applications

Serves as the foundation for an intelligent network infrastructure that provides efficiencies, increases safety and enables smarter business decisions

Solution Implemented

ArcFM™ Networks

CUSTOMER BENEFITS

- Increased accuracy of information
- Highly configurable and easily adapted for multiple uses



Established in 1924, Colorado Springs Utilities is the public utility provider for the Colorado Springs area. Its employees administer electric, natural gas, wastewater, and water services to approximately 225,000 residential and business customers in El Paso County. As a community-owned utility, Colorado Springs Utilities' main purpose is to provide exceptional customer service, competitive prices and help protect the environment.

Colorado Springs Utilities has used Schneider Electric technology since the early 2000s, when it became one of the earliest adopters of ArcFM™ Network.

Challenges

Prior to implementing Schneider Electric's ArcFM solution, Colorado Springs Utilities was relying on multiple CAD and GIS configurations for the management of its electric, natural gas, wastewater, and water sectors. The network designs needed to be manually cross checked with multiple source documents, and any updates to the system required updates of numerous documents, schematics and map products. This inherently presents opportunities for inconsistencies that result in a reduced confidence in the data, products, and in the desired results.

This time-consuming process did not always generate an accurate analysis or make the best use of resources. Additionally, the electric, natural gas, wastewater,

and water sectors of Colorado Springs Utilities were all using different strategies to manage resources, leaving the company with no centralized knowledge of its assets.

“We found that we were buried in mountains and mountains of map books, and the amount of support it took to manage and administer the data created significant overhead for us,” explained Randy Scott, utility GIS solutions supervisor at Colorado Springs Utilities. “We needed a unified solution that maximized flexibility and efficiency.”

Recognizing the inefficiencies in its asset management practices led Colorado Springs Utilities to look into adopting a single GIS solution that would enable each of the utility sectors to manage and map its records in a more sophisticated and unified way.

Solution

Colorado Springs Utilities wanted to integrate its data into a GIS-platform for improved data management and functionality. Colorado Springs Utilities selected Schneider Electric’s ArcFM solution because of its straightforward and highly flexible interface, as well as the benefits it provided in the data management process.

“The ability to do seamless mapping was critical,” said Scott. “Before, we were using dozens of hard copy map books paired with digital copies of the maps for the distribution of infrastructure information. One edit to any part of the networks meant updating one or more set of data and the associated products.”

Colorado Springs Utilities also found it invaluable to have the ability to integrate the visual and qualitative information, as well as to access the most up-to-date data in multiple locations—whether in the field or the boardroom.

The Bottom Line

With the implementation of Schneider Electric’s ArcFM Network Solution, Colorado Springs Utilities experienced improved efficiencies almost immediately. Schneider Electric worked closely with Colorado Springs Utilities staff to convert its outdated and disparate GIS and CAD systems into the ArcFM GIS Enterprise solution. This helped Colorado Springs Utilities quickly move its four utility sectors to a centralized geodatabase and to make data

management easier, more efficient and flexible.

With this shift in the system, Colorado Springs Utilities has been able to avoid the need to enter information into multiple databases and storage formats, saving the utility valuable time and resources.

“The great lengths we went to in order to create and administer data inflicted significant costs upon us,” said Scott. “Now, just a handful of editors can quickly and accurately integrate information from engineering, construction, maintenance, and operations personnel. And our employees are utilizing that information almost immediately.”

Colorado Springs Utilities has found it beneficial to have its GIS put out one version of the truth, reliably informing a variety of critical functions, such as dispatching, troubleshooting, engineering analysis, planning, reporting, and customer service.

Colorado Springs Utility also has used Schneider Electric’s ArcFM technology to help in an unconventional circumstance. In June of 2012, Colorado Springs Utility found its city in the midst of a disaster. Massive wildfires were encroaching on the city, threatening both residential and commercial infrastructure. Colorado Springs Utilities was able to support emergency workers and officials by providing utility infrastructure information so they could quickly assess, plan and respond to current threats.

Additionally, the highly detailed and flexible nature of the ArcFM platform allowed Colorado Springs Utilities to quickly assess and respond to utility shut-off and restoration needs. For example, as the fire destroyed buildings, the utility could pinpoint where to stop gas and water service to avoid additional issues and wider service interruptions.