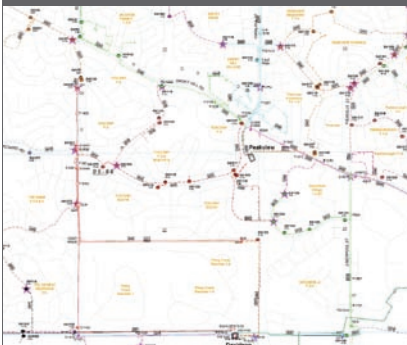




# Intermountain Rural Electric Association

## GIS Eases Workforce Transition and Boosts Efficiency

### CASE STUDY



#### CHALLENGE

In the face of a dramatic workforce shift, Intermountain Rural Electric Association needed to update network maps and optimize customer information and CAD data.

#### RESULTS

- IREA has seen an immediate return on investment as GIS provides the ability to quickly access data and generate maps.
- The utility was able to migrate its CAD data to GIS and is now fully geospatially enabled.
- Response to requests is faster and more accurate.

*“The GIS we now have through ESRI has opened the door to new ideas and possibilities to solve problems. For years and years, we have had a lot of good data, but it hasn’t been available to the enterprise. Knowledge about our network that was once passed along from person to person is now in the database and accessible to everyone.”*

—Duane Holt  
Senior Supervisor of GIS for IREA

With nearly 137,000 customers and more than 200 distribution feeders, Intermountain Rural Electric Association (IREA) is one of the largest and fastest-growing electric distribution cooperatives in the United States. IREA’s 5,000-square-mile service territory includes all or parts of 10 counties east, west, and south of the metropolitan Denver area and west of Colorado Springs, Colorado.

#### The Challenge

Several of IREA’s 185 employees will be retiring soon. The impending workforce shift will mean a less-experienced replacement staff and the potential loss of data stored in the heads of seasoned employees. IREA also needed to clean up its customer information system and achieve greater functionality with its computer-aided drafting (CAD) data.

#### The Solution

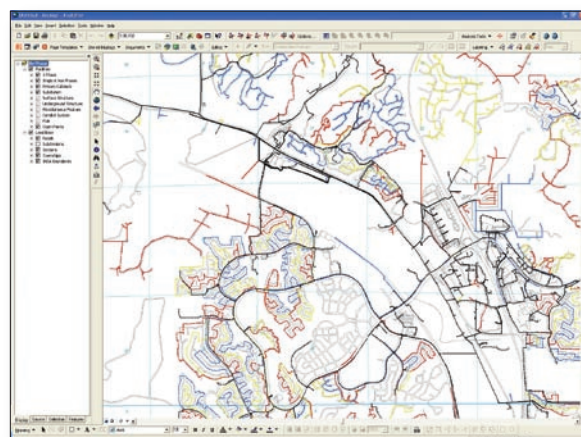
IREA implemented a geographic information system (GIS) based on ESRI’s ArcGIS® Server and ArcGIS Desktop technology. The utility chose ArcGIS Server and ArcGIS Desktop because of the out-of-the-box applications and services for spatial data management, visualization, and spatial analysis. ArcGIS Server complements ArcGIS Desktop by allowing GIS analysts to publish maps, globes, and data processing tasks and make them available company-wide.

“The GIS we now have through ESRI has opened the door to new ideas and possibilities to solve problems,” said Duane Holt, senior supervisor of GIS for IREA. “For years and years, we have had a lot of good data, but it hasn’t been available to the enterprise. Knowledge about our network that was once passed along from person to person is now in the database and accessible to everyone.”

The utility also chose the ArcFM solution from ESRI business partner Telvent Miner & Miner to provide specific utility industry tools for editing, configuring data models, and managing facility information. ArcFM works with ArcGIS Desktop and ArcGIS Server by helping the utility maintain electrical facilities, keep track of jurisdictional changes, and perform a variety of mapping applications. Corrected data and up-to-date maps can then be distributed throughout the company.

“Our employees used to see pieces of the picture in their minds or on a scrap of paper,” Holt said. “Now they can all see the whole picture and contribute to it.”

In addition to buffering IREA from workforce changes, ArcGIS Server and ArcGIS Desktop technology served as the catalyst for a much-needed data cleanup of the customer information system.



*During a recent weather-related outage, maps showing primary line routes colored by phase helped crews determine which repairs would restore power to the greatest number of customers and helped prioritize the restoration efforts.*

Learn more at [www.esri.com/electric](http://www.esri.com/electric).

## Intermountain Rural Electric Association

### ESRI SOFTWARE USED

ArcGIS Desktop  
ArcGIS Server

### OTHER SOFTWARE USED

ArcFM from Telvent Miner & Miner  
Oracle® Database

### DATA USED

County data  
Aerial photography  
Network data  
Billing data

### HARDWARE

Standard PC

### FOR MORE INFORMATION



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### The Results

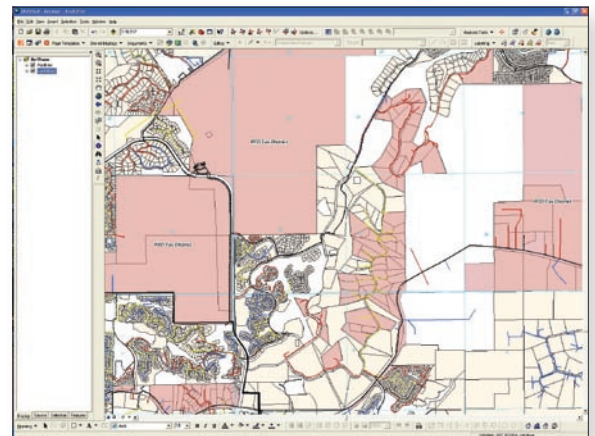
After a speedy and successful implementation, IREA has an enterprise GIS based on ArcGIS Server and ArcGIS Desktop along with ArcFM from Telvent Miner & Miner. The unmatched speed of GIS for accessing data and generating maps proved to be an immediate return on investment for IREA. The utility was able to migrate its CAD data to GIS and is now fully geospatially enabled. For customer information, GIS data is now compared to the billing system to ensure accuracy and improve integration.

One major concern in undertaking the migration was downtime. Through effective workaround strategies and a diligent implementation, migration was quick and successful, with minimal disruption of work routines.

"A successful pilot study allowed us to save a great deal of time and money," Holt said. "With ESRI's help, the complete expedited implementation finished right on schedule without a glitch. I couldn't be happier with the success."

Efficiency at IREA continues to gain momentum as the utility explores the possibilities of geographic information. ArcGIS Server houses layers of information including electric networks, billing records, county data, and aerial photography. Data queries can be answered by simply pulling up a couple of layers in the GIS.

"The system has allowed the GIS staff of three people to respond to varied requests much faster and more accurately," Holt said. "The company is only beginning to realize the capabilities of this seemingly limitless technology."



*Overlays of tax districts allow the accounting department to visually clarify ambiguous boundaries and correctly apply appropriate taxes to customer bills.*

Learn more at [www.esri.com/electric](http://www.esri.com/electric).