

## Building a digital twin and system of record in four months

### Introduction

A leading North American network operator, overseeing thousands of miles of fiber connecting communities, businesses, and carrier partners, was preparing for a major merger. That transition brought new demands for speed, scale, and visibility across the organization. To move forward, the company needed a more accurate and accessible way to understand its network and how teams planned, built, and operated it.

### The challenge

For years, the company relied on GE Smallworld as its enterprise GIS platform. As the network expanded and asset complexity grew into the millions, the system became harder to maintain and slower to adapt. Desktop-based workflows and limited integration options made it difficult to support consolidation across multiple operating regions.

A prior modernization effort had stalled, prompting the team to look for a partner who could provide not just a strong platform, but the strategic expertise and execution required to succeed. The goal was clear. Migrate decades of highly complex network data into a modern, cloud-based system of record quickly, securely, and with minimal disruption to daily operations.

### The problem

Managing data across multiple operating regions meant every project relied on manual coordination. Small inconsistencies added up, creating rework, delays, and risk across planning, permitting, and customer activation. Handoffs between planning, design, construction, and operations were harder than they needed to be, slowing decision-making and time to service.

Previous modernization efforts led the team to look for a partner who could move fast to stay aligned with integration plans.

### Why 3-GIS as the solution?

- > Telco migration experience
- > Rapid implementation
- > Esri-compatible architecture
- > Strong data integrity
- > Scalable GIS foundation

## The solution

The company chose 3-GIS for its experience migrating complex telecom networks and its ability to deliver on a compressed timeline. Together, the teams built a structured, phased approach to transition off GE Smallworld and establish a cloud-based digital twin serving as the operator's unified system of record.

The migration, spanning thousands of network assets and records, remains on schedule for completion within four months. The implementation is designed to:

- > Reduce rework by improving data consistency across teams
- > Speed up customer connections by improving visibility from plan through operations
- > Support cleaner handoffs between planning, design, build, and operations
- > Establish a single, trusted source of network truth

**"We knew this migration project was highly complex and expected roadblocks along the way. The 3-GIS team has been a stellar partner, not just as software experts, but as people who understand our business and help us solve real problems. They've been an incredible group every step of the way."**

**- Senior Project Manager at National Network Operator**

## About us

3-GIS empowers telecom and utility companies to achieve better operating efficiencies and to meet the challenges of building increasingly complex networks. 3-GIS uses a data driven approach based on geospatial reference, rules-based calculations, mobility, and web-based services to revolutionize the potential and realize the market opportunities of network assets. With products purpose built for telecom and utility operations, we provide the visibility and confidence teams need to make better decisions, reduce costs, and move faster.

Our fully-configurable solutions allow users to plan, design, and manage networks; provide real-time data that is used enterprise-wide; and enable automation for faster service activation, in one seamless system. The company has development, design services, product support, and operational staff in five countries challenging the status quo every day to improve the economic visibility of the networks we depend on; creating a more connected and informed world.



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how 3-GIS can benefit  
your organization.**

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