User

Atlantic Engineering Group, a full-service FTTH design-and-build firm with nearly 20 years' experience

Partner

3-GIS, an award-winning Esri Gold Tier partner since 2006

Challenge

Quickly replace a legacy fiber-to-the-home design process with a modern, cost-efficient solution that seamlessly scales to meet changing client workload needs

Solution

ArcGIS® Platform, 3-GIS Suite

Results

Atlantic Engineering Group can flexibly scale design and engineering capacities to changing customer needs, while real-time dashboards give supervisors greater visibility into workflow accountability.
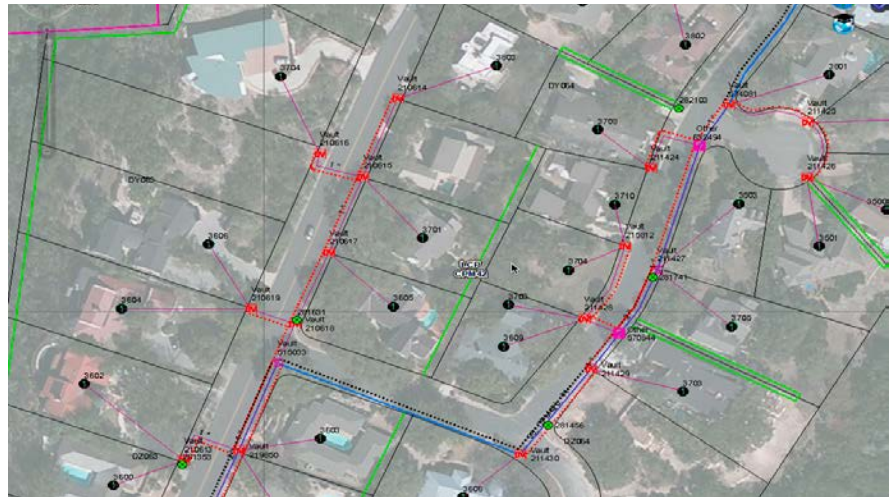
A FIBER SOLUTION THAT SCALES

Atlantic Engineering Group (AEG) designs and constructs fiber-to-the-home (FTTH) networks. With offices across the United States and additional contracted overseas designers, AEG manages FTTH projects of various sizes and with constantly changing schedules. In the past, AEG met client needs by using paper, pen, and manual drafting processes. Tasks such as calculating bills of construction needed to be repeated with each design change. These design changes often required repeating the entire workflow and processing the related information up to four times.

The Challenge

Recently AEG took on a large FTTH project with highly variable workload requirements. AEG realized its legacy system was not flexible enough to scale up and then down as the project required. AEG needed to deploy a new fiber management system (FMS) quickly, without disrupting current projects or limiting the ability to pursue new ones. The FMS needed to provide project scalability. It also had to avoid the start-up costs associated with purchasing and installing hardware and software for new subcontracted designers and engineers. AEG wanted a digital solution that eliminated costly and cumbersome manual efforts for transcribing designs from paper into a drafting system. Going digital would automate and streamline the design process by eliminating the manual editing of hundreds of files to reflect a single design change.

> "The Esri-based 3-GIS system streamlined our update process and improved review efficiencies. Additionally, our data-management costs have been reduced tremendously."

Jimmy Salter
Vice President of Operations

The Partner and the Solution

Esri partner 3-GIS proposed a simple, innovative solution using the Esri® platform. The 3-GIS solution suite (3-GIS Live, 3-GIS Web, and 3-GIS Mobile) enabled AEG to take advantage of geographic information system (GIS) technology without any prior mapping experience. AEG liked the 3-GIS solution's functionality and ability to deploy quickly and easily. Although AEG had not previously used ArcGIS, 3-GIS helped AEG deploy the 3-GIS solution suite, the Esri platform, and ArcGIS Server on Amazon Web Services within two weeks. 3-GIS provided live premium support during the implementation phase and continues to provide ongoing support services in the form of database backups, system maintenance, and software upgrades. This support allows AEG to focus resources on its core business: designing and constructing FTTH networks for its clients.

The Results

AEG can now scale to meet any client needs, increasing designer capacity to meet expedited scheduling needs or scaling back projects on short notice. Bill of materials calculations integrate directly into the GIS, eliminating the need for manual recalculations. In addition, designers can log in from any location and support each other's work through access to the entire fiber network design as if they were working in-house together. There is no maximum file hosting size, so full network and existing infrastructure and rights-of-way information is available to reference as staff work on individual design elements. Clients reviewing designs can do so online with dashboards , speeding the review and editing process.

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