

**CASE STUDY** 

Groton Utilities:
Improving
Efficiency &
Performance with
Enterprise Asset
Management



#### A Connecticut utility deploys integrated solutions to streamline asset management, maintenance, and reporting.

Like many utility companies, publicly owned Groton Utilities lacked a comprehensive system to manage its assets across all lines of business. Without an enterprise-wide service request and work order system, it was difficult for the company to track infrastructure data, control expenses, and make informed maintenance decisions. To address these challenges, Groton Utilities is undergoing a multi-year overhaul of its asset management workflows and expanding its existing portfolio of Trimble Utilities solutions with additional capabilities to improve operations and performance.





#### **Table of Contents**

- Legacy System Lacked Data Visibility Page 3
- Digitizing Enterprise Asset Management Page 5
- (a) Unifying Data & Connecting Workflows for Efficiency Page 7
- Benefits of an Integrated Platform Page 10



## **Legacy System Lacked Data Visibility**

Located in southeastern Connecticut, Groton Utilities is the primary provider of electric, water, and wastewater services to more than 38,000 residential customers and a vibrant business community that includes the pharmaceutical giant Pfizer, the submarine manufacturer General Dynamics, and a U.S. naval submarine base. The newly commissioned dissolved air flotation water treatment plant provides water to these customers and an additional 7,000 residents in the surrounding area daily.



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As a Trimble Utilities customer for more than 20 years, Groton Utilities has been using a range of hardware and software products in its water, wastewater, and electric departments to help with everything from data collection and monitoring to risk modeling. However, in 2021, the company was still managing assets using spreadsheets with multiple separate databases. These legacy methods created data silos that made it difficult to identify missing and historical asset data. Sharing data across departments was cumbersome and lacked clarity.

"There was no doubt that technology was the answer to our problems, but we were unclear as to exactly which solutions it would take to turn things around," said Ronald Gaudet, Director of Utilities at Groton Utilities. "We recognized the need to digitize our data and to implement solutions that could talk to each other across departments to maximize efficiency and better support our investment decisions."

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### **Digitizing Enterprise Asset Management**

Despite some initial hesitancy about pursuing a fully digital asset management solution, Groton Utilities' advisory board made the decision to adopt the Trimble Cityworks platform for enterprise asset management (EAM) and integrate with Trimble Unity RM remote monitoring software and Telog advanced IoT hardware monitoring solutions. Assisted by implementation partner KCI, Groton Utilities is in the process of integrating these solutions with its existing Trimble Utilities capabilities across its water, sewer, and electric departments over a 3-year period.

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> Ronald Gaudet, Director of Utilities. **Groton Utilities**



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"Groton Utilities is dedicated to minimizing the impact of rising costs on our customers as much as possible while remaining fiscally responsible," said Gaudet. "Adopting new technology helps us manage our assets more effectively and make informed maintenance and staffing decisions that allow us to provide the highest level of service to our customers."

To maximize the benefits of integrated digital technologies and connected workflows, Groton Utilities is implementing Trimble asset lifecycle management solutions across all utilities, including water, wastewater, and electric. The combination of Trimble Utilities and Cityworks provides a platform for managing public infrastructure throughout its lifecycle, including the ongoing operation, maintenance, and eventual replacement of infrastructure assets.

This asset lifecycle management approach is possible because all team members will have access to consistent, real-time, actionable data about the location and condition of each asset in the network—such as flow rates or pipe integrity in a water system—so they can efficiently track each asset and make informed decisions about everything from emergency response to preventive maintenance to long-term planning.

- Adopting new technology helps us manage our assets more effectively and make informed maintenance and staffing decisions that allow us to provide the highest level of service to our customers."
  - Ronald Gaudet, Director of Utilities, Groton Utilities





# Unifying Data & Connecting Workflows for Efficiency

Built exclusively on the **Esri ArcGIS®** geographic information system, Cityworks provides a GIS-centric solution for managing public assets, while also supporting community development, permitting, licensing, budgeting, reporting and more—all on a single platform. With the integrated **Cityworks Mobile application**, utilities teams can connect their office-to-field-to-office workflows, improving data accuracy and operational efficiency for tasks such as scheduling and performing inspections, maintenance activities, and repairs.





#### **Solutions Used**

- + Trimble Cityworks
- + Trimble Unity RM
- + Telog IoT Devices
- Esri ArcGIS®

These connected workflows help break down communication silos by providing data visibility to key stakeholders. For example, Trimble Unity software translates and stores data that is remotely transmitted from Telog equipment and IoT devices installed throughout the utilities' service area. This data is then tied into Cityworks for maintenance, inspections and other activities to help teams deliver utilities services that are reliable and resilient.

"We're very excited about the Trimble Cityworks configuration related to our water treatment laboratory," Gaudet said. "Currently, our laboratory technicians go to the field and collect the data needed for state reporting. They used to spend hours inputting the data into the required forms. With Trimble Unity and Cityworks, our lab collects the data in real time on a mobile device and requests a report through Cityworks in minutes rather than hours."







The integrated solution will also enable Groton Utilities to better manage its infrastructure assets across years or decades of its service life. "We plan to use Cityworks to track all assets currently owned by Groton Utilities, particularly how often each asset requires maintenance," said Gaudet. "This will enable us to identify which assets should be replaced rather than continuously sinking funds into a patchwork fix that will eventually fail."

In addition to improvements in asset management, maintenance, and reporting, the budgeting team will be able to make more accurate forecasts by using Cityworks to view the estimated equipment, labor, and materials costs associated with the work orders that are expected for the next fiscal year.

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## **Benefits of an Integrated Platform**

Groton Utilities is already experiencing the benefits of the new enterprise solution even prior to its full implementation. The seamless integration of asset management and maintenance operations is resulting in a greater understanding of assets, less rework, increased productivity, fewer outstanding work orders, and improved reporting.





Enterprise-wide, the Trimble platform is helping Groton Utilities support a comprehensive range of additional business-critical activities, including utility vegetation management, outage management, distribution, payroll, and more. Data flows to the relevant team members throughout the entire organization.

- Our water treatment laboratory technicians used to spend hours inputting collected data into the required forms for state reporting. Now, they collect the data in real time on a mobile device and initiate the report in minutes."
  - Ronald Gaudet, Director of Utilities, Groton Utilities

Field workers are integral to this flow of information, using mobile devices to quickly gather asset data and add it to the GIS, easily initiating service requests, adding notes to a work order, documenting completed work, and more.

#### **Benefits of Trimble's Connected Solutions**

- + Integration of asset management and maintenance workflows
- A more holistic understanding of assets
- Less rework
- **Increased productivity**

- **Fewer outstanding work orders**
- **Improved reporting**
- **Streamlined business processes**







For more information about strategies and solutions to manage utilities across the asset lifecycle—and to find more customer success stories—visit **Utilities.Trimble.com**.

