Four Amazing Ways Utilities Improved Numbers with the ArcGIS Platform

Across the world, utilities are improving communication, saving money, and getting more out of their existing resources□—□thanks to the ArcGIS platform.

By Sarah Alban, Esri

What if a few days or weeks of work meant you would reap a year or more of benefits? Utilities are making that happen, just by tapping the existing power of their ArcGIS platform.

1. Fort Hill Natural Gas Authority Shaves a Decade off Mapping Project

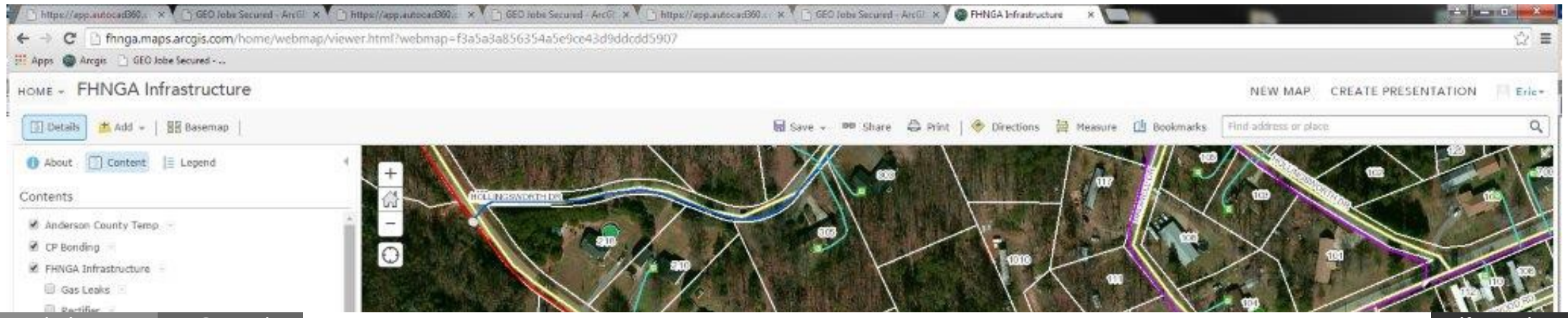
South Carolina, USA

"When you look at all of the attributes you would need to map under a traditional system, it could take 10 to 15 years. With the Esri platform, we've been able to do 75 percent of that in a two- to

three-year window."

— Eric Foster, Network Administrator, Fort Hill Natural Gas Authority

Fort Hill Natural Gas Authority (FHNGA) faced federal regulations requiring improvements to their operating systems. The utility needed to add historical asset data (i.e., annual inspections and maintenance issues information). The GIS team used the ArcGIS platform and Esri partner solution from GEO-Jobe's online solutions to implement a high-accuracy data collection workflow.



Fort Hill Natural Gas Authority field crews move much faster on tablets, saving time and dramatically reducing costs.

The solution let field crews complete work faster and more accurately with mobile devices. In addition, users can access a web map of asset information. In addition to meeting regulations, FHNGA has improved efficiency and saved time and money.

Read More: **Full Compliance, Faster Fieldwork at Fort Hill**

2. CEZ Cuts 84,000 Workdays with Web GIS Permitting Application

Prague, Czech Republic

"The process involved a lot of paper work and usually took more than half a day for the common citizen to make the request properly and to send it through mail. The web portal simplified the process to minutes."☐—☐*Frantisek Fiala, Consulting Specialist, CEZ*

Much of the Czech Republic's utilities infrastructure lives underground. So landowners who would like to build need to consult utilities for an appraisal of the type and location of underground assets. At one point,

CEZ was receiving approximately 430 requests per day.

A web application enables permit review processing in minutes, taking a formerly manual process down from hours.

To offload some of the manual work of reviewing these appraisals, CEZ's GIS team build a web portal based on the ArcGIS platform that processes appraisal forms within minutes. The utility estimates saving 84,000 workdays of labor.

Read More: CEZ Cuts 84,000 Workdays with Web GIS Permitting Application

3. ENSTAR Adds 37,000 Meters to the GIS in a Year

Alaska, USA

"Through our Esri-based ENSTAR Mobile Maps solution, we have been able to collect valuable meter location information and quickly turn it around for use by our service technicians and others

in our company.”☐—☐Erick Johnson, GIS Specialist, ENSTAR Natural Gas

ENSTAR used to produce a paper completion report to update as-builts annually. Until recently, field technicians would complete inspections with paper maps and printouts before manually entering this data into the utility’s GIS.

ENSTAR takes its ENSTAR Mobile Maps app into the field to edit data offline and seamlessly sync daily. In this way, they added 37,000 meters to the utility's GIS in one year.

By using an Esri developer kit and regional custom software developer, the utility was able to build the ENSTAR Mobile Maps app off the ArcGIS platform. Technicians edit the data offline and sync daily. They added more than 37,000 meters in the app's first year.

Read More: ENSTAR Mobile App Modernizes Meter Mapping in Alaska

4. County Cuts Cost by 50 Percent

to Inspect and Clean Catch Basins

Washington, USA

“Supervisors can see locations of all work orders spatially, using appropriate work-task filters. They have total access from the office or field. Thanks to maps, apps, and dashboards, they can see up-to-date work order status□—□with pictures□—□and adjust schedules as work is completed.”□—□Bryan Chappell, Water Quality Supervisor Pierce County Public Works and Utilities, Road Operations Division

Pierce County Road Operations Staff had limited access to map data in the field, which led to some catch basins needing cleaning. To ensure more accuracy in field assessments and cleanings, the utility used the ArcGIS platform to make mapped data available in the field.

A variety of web maps, apps, and dashboards lets Pierce County dramatically cut costs on catch-basin inspections and cleanings.

Today, teams access more than 200,000 drainage features via ArcGIS Online on iPads. With greater field efficiency online and offline, the organization dropped costs associated with regulation compliance from $120 to $60 per catch basin.

Read More: Spatial Data a Catch for Pierce County

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