

FIELD OPERATIONS
WEBINAR SERIES
UTILITIES, WATER AND TELECOM

May 14 | **May 21** | May 28

Inspect | Construct | Innovate



FIELD OPERATIONS WEBINAR SERIES

UTILITIES, WATER AND TELECOM

**Improving
Inspections and
Maintenance**



May 14

**Optimizing
Capital Work**



May 21

**Transforming
Fieldwork with
Advanced
Technologies**



May 28

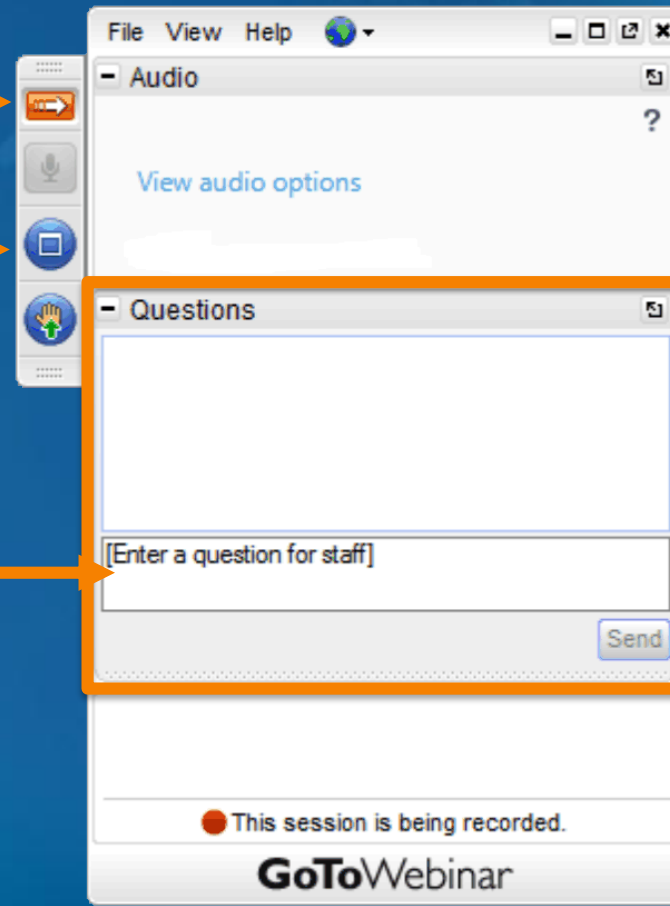
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**Expand or Collapse
Your Control Panel**

Adjust Your View

Ask a Question



**Submit Your
Question**

**** The Webinar is Being Recorded ****

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Speakers



Christa Campbell

Industry Specialist
Water

Esri

Moderator



Pat Hohl

Director
Electric

Esri



Vincent Fortino

Solution Engineer
Water

Esri



Junjie Ma

Solution Engineer
Utilities & Telecom

Esri

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Agenda

- Overview Delivering capital projects
- Demonstration Constructability review from the field
- Demonstration Real-time project tracking
- Demonstration External-facing communication
- Review & Questions and Answers

Field Operations

Optimizing Capital Work

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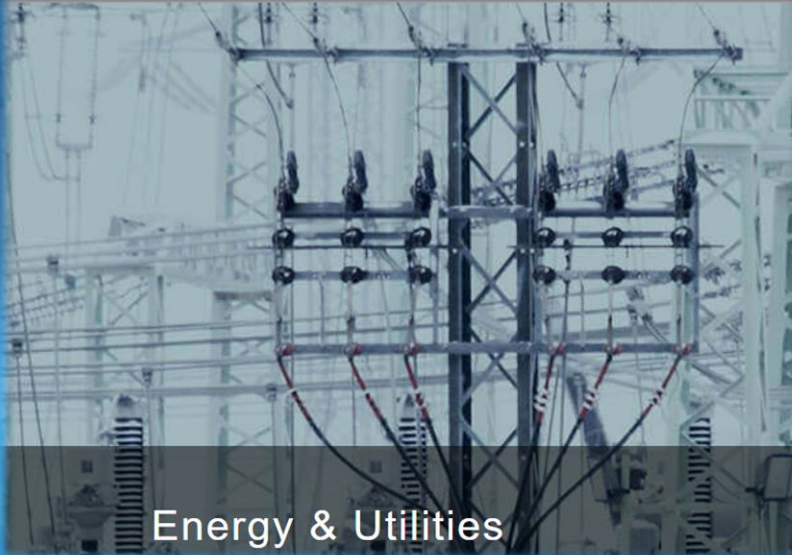
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▶ EASi.



Energy & Utilities

As the volume of capital projects increases, it is critical for utilities to optimize, standardize and automate their project execution process by maximizing efficiencies.



Municipal utilities in the United States are expected to spend \$629 billion on capital expenditures (CAPEX) over the next decade.

News

Despite Financial Hurdles, Utility Capital Spending to Remain Elevated

POWER

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Plan

Use location to plan and coordinate field activities



Navigate

Navigator for ArcGIS



Coordinate

Act on real-time conditions in the field to update worker tasks



Understand

See what's happening around you with maps



Monitor

Know where workers are and see the progress of work in real-time

Capture

Perform data collection and send it back to the office from anywhere



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**Constructability
Review**



**Real-Time
Project
Tracking**



**External-
Facing
Communication**

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Constructability
Review

Timely reference information comes from **understanding** what is nearby, and clear **communication**.

- How can crews use the latest reference maps?
- How can field staff provide feedback?
- How does a project tie into the system?

Demonstration | Constructability Review

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Constructability Review with Web AppBuilder for ArcGIS

Find address or place

60ft
-88.152 41.774 Degrees

nearmap | Esri | POWERED BY esri



Vincent Fortino

Constructability Review



Pat Hohl

- Access reference documentation
- Redline changes
- Tie-in safely



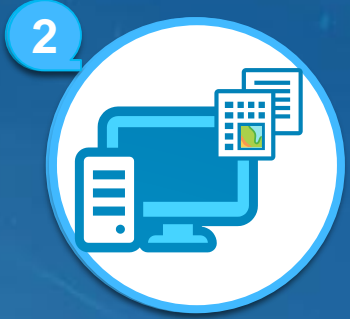
Collector
for ArcGIS



Web
AppBuilder
for ArcGIS

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Real-Time
Project
Tracking

Effective project coordination depends on **real-time communication** of information from the work site.

- How can incremental progress be managed?
- How can as-builts be accelerated?
- How can contractor performance be monitored?

Demonstration | Real-Time Project Tracking

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Total Mileage
+249,212 Miles

Extent Mileage
+247,962 Miles

Document Pending
+171,471 Miles

Document Released
+0.127 Miles

Construction Underway
+57,548 Miles

Infrastructure Built
+19,508 Miles

Cable
+0.027 Miles

Cancelled
+0.027 Miles

Clear Out Completed
+0.027 Miles

Construction Status Daily Update

- Updated Status: Construction Underway
Cx Detail: Overlook (295,37 Fts)
Editor: jun10830@earth.com_safecomms
5/19/2020, 9:41 AM
- Updated Status: Cancelled
Cx Detail: New Aerial (193 Fts)
Editor: jun10830@earth.com_safecomms
5/19/2020, 9:21 AM
- Updated Status: CloseOut Completed
Cx Detail: Overlook (116,25 Fts)
Editor: jun10830@earth.com_safecomms
5/19/2020, 9:18 AM
- Updated Status: Restoration Pending
Cx Detail: Overlook (228,47 Fts)
Editor: jun10830@earth.com_safecomms
5/19/2020, 9:18 AM
- Updated Status: Splice and Test
Cx Detail: Overlook (15,423,79 Fts)
Editor: jun10830@earth.com_safecomms
5/19/2020, 9:17 AM
- Updated Status: Restoration Pending
Cx Detail: Overlook (264,92 Fts)
Editor: jun10830@earth.com_safecomms
5/19/2020, 9:16 AM
- Updated Status: Cable Installed
Cx Detail: Overlook (419,5 Fts)
Editor: jun10830@earth.com_safecomms
5/19/2020, 9:14 AM
- Updated Status: Document Released
Cx Detail: New Aerial (202,45 Fts)
Editor: jun10830@earth.com_safecomms
5/19/2020, 9:04 AM
- Updated Status: Document Released
Cx Detail: New Aerial (124,74 Fts)
Editor: jun10830@earth.com_safecomms
5/19/2020, 9:04 AM
- Updated Status: Document Released
Cx Detail: New Aerial (344,21 Fts)
Editor: jun10830@earth.com_safecomms
5/19/2020, 9:04 AM
- Updated Status: Document Pending
Cx Detail: Overlook (62,71 Fts)
Editor: jun10830@earth.com_safecomms

Progress by Placement (Fts)

Category	Aerial (Fts)	Underground (Fts)
1	253.8k	136.1k
2	274.1k	164.4k
3	175.8k	188.5k
4	21.2k	187.2k

Legend: Aerial (Blue), Underground (Purple)



Junjie Ma

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Real-Time Project Tracking



Pat Hohl

- Track work progress
- Collect as-built data
- Inform the project team



ArcGIS
Dashboards



Collector
for ArcGIS

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3



External-
Facing
Communication

Clear project communication stems from **understanding** current conditions and **where** they occur.

- How can customers stay informed?
- How can Field disruptions be reduced?
- What are some real examples?

Demonstration | External-Facing Communication

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MY ACCOUNT GET GAS STREET WORK ALL ABOUT GAS E-ACCOUNT

- STREET WORK
- WORKING ON PIPES
- WORKING ON THE STREET
- WORKING ON THE SIDEWALK
- WORKING ON THE LANDSCAPE
- FUTURE WORK**
- WHAT SHOULD I KNOW?

HOME / STREET WORK | **FUTURE WORK** |

FUTURE WORK



Did you know that we plan and complete hundreds of pipeline upgrade construction projects every year? On this page, you can see which projects are up next.

We want to let you know when we will be in your area for a construction project and what you can expect before, during, and after our pipeline upgrade and renewal work. Using the map below, you can check out our planned schedule for the next 2 weeks by entering an address or zooming in on a specific location. Our construction projects are highlighted, and by clicking on a route, you can see more information about that project. These projects are color-coded by status.

We make every effort to complete our pipeline replacement projects as quickly as possible to minimize the disruption to our customers, but project timelines may have to be adjusted based on weather conditions. Please note that emergency calls always take first priority, and any emergency work is not represented on this map.



Project Status

Each of our projects displayed on the map is color-coded, based on its status. Here's a list of each status by color, so you know where we are with a specific project at-a-glance:

Ready for Construction:

Construction project is scheduled to begin within one month.

Construction in Process:



Vincent Fortino

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External-Facing Communication



Pat Hohl

- Improve service
- Tell about Where
- Utilize real-time data



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Wrap up



Constructability Review



Real-Time Project Tracking



External-Facing Communication



Pat Hohl

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Stay Connected



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- @EsriElectricGas
- @EsriTelecom



- Water Utilities
- Electric and Gas
- Telecommunications



- Christa Campbell
- Pat Hohl



esri

THE
SCIENCE
OF
WHERE

