

IMPLEMENTING THE ArcGIS PLATFORM AT WHITE HOUSE UTILITY DISTRICT, TENNESSEE



WHITE HOUSE UTILITY DISTRICT

Agenda

- Introduction
- CIP Planning Tool
- Water Outage Process
- GIS / SCADA Integration





WHITE HOUSE UTILITY DISTRICT



POWER
ENGINEERS



esri[®]

About White House

- 30,000 water connections over a 600-square-mile area
- 1,000 miles of water pipes
- 21 water storage facilities providing 14 MGD of water per day
- 2,000 wastewater connections



White House Solutions

Water Utility Editing Tools

Water Network Viewer

Map Change Request

Utility Isolation Trace App

Customer Service Outage Viewer

CIP Map

Capital Planning Tools

Hydrant Inspection

Outage Resolution Map

Sewer Network Viewer

AccuWeather

Field Outage Map

Backflow Preventers Map

Flow Meter Map

Tank Valves Map

Planned Outage App

Escrow Hydrant Verification Map

Estimated Valves Map

Leak Detection Logger Map

Leak Detection Map

Radio Meters Map

CIP Dashboard

AVL Dashboard

Outage Dashboard

Executive Dashboard

SCADA Dashboard

Work Order Dashboard

Activity Dashboard for ArcGIS



CIP Planning

- Spatially see all the Current and Future Capital Improvement Projects
- Wanted high level status and help with future project planning and Budget process



CIP Planning

- Most future projects were in spreadsheets and current project statuses are in reports
- Engineering needed to be able to create, update and maintain their CIP data



CIP Planning

- Work with Esri to convert existing water and sewer data to the LGIM
- Ability to easily use Esri's Capital Planning Tool



CIP Planning

Demonstration



Water Outages

- Need to streamline current water outages processes
- Eliminate phone calls and emails
- Unplanned and Planned outages



Water Outages

- Wanted a way for staff to create, updated, maintain, or view all current and planned outages
- Process need to be done in the field
- Also do view historical outage data



Water Outages

Demonstration



SCADA / GIS Integration

- Ability to quickly view SCADA information in the field and away from the plant
- Ability to do historical trending with the SCADA information



SCADA / GIS Integration

- Esri Workshop / Use GeoEvent Processor
- Currently using GEP for AVL and some notifications
- Application created that pulled data from SCADA and was easily inputted into GEP



SCADA / GIS Integration

- Phase 1 (Water and Remote Sites)
 - 16 Water Tanks
 - 17 Flow Meters
 - 12 Pump Stations
- Current and Historical Feature in SDE



SCADA / GIS Integration

Demonstration



Closing

- Get information to staff quickly
- Many different ways to present data based on needs
- Staff is vested in GIS
- Valve tracing and Map Change Request

