Mobile GIS for Gas Operations at The Energy Coop

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Mobile is not an app… it’s an enterprise strategy.

- Our job: Support complex requirements and make it look easy.
Advantages

Fast and simple
Empowering the business
Reducing operational costs

At utility scale
Key Characteristics

Rock-solid, fast, and scalable offline

Extreme usability of apps

Works in the enterprise ecosystem
Key Capabilities

Mobile Maps

• Making GIS available anytime, anywhere
• Multi-platform, common back-end

Mobile Workflows

• Enabling collaboration between field and office
• Digital redlining workflows
• Data collection workflows
Device platforms

Windows (for crews)
- Laptops in trucks
- Network tracing
- Redlining tools

iPad (for inspectors)
- Tablet to carry on foot
- Data collection forms
- Photos and sketching

Barcode scanner and GPS antennae
Demo – Viewing, Tracing, and Redlining on a Windows Laptop
Gas Utility Profile

• 30,000 gas meters

• Gas lines in 11 of 88 counties

• 1700 miles of pipeline
  • 940 mi Distribution
  • 500 mi Gathering
  • 250 mi Transmission & Sub-transmission
History of Mapping

Microstation & Mylar

• ArcGIS in 2012
• ArcFM in 2016
• Designer Express
• ArcFM Web

ArcFM Mobile new this year

• Implemented by ESC Engineering
Business Drivers
Less Is More

Decrease the amount of paper
  • Duplication/carbon copy

“Tribal Knowledge” mentality
  • Shared data

Reduction in Cost
  • Warm winters
Where Are We Now?

Starting leak program with ArcFM Mobile

- Leak survey
- Leak repair
Expected Results

Eliminate Paper Records

• Carbon copies
• Minimal administration
• More reliable inspection records

Increase in Productivity

• Efficient
• Empowering
• Faster communication
Future Uses

• Increase Inspections
  • Farm Taps
  • Exposed Pipe

• Construction Crews
  • Red-lining
  • As-Built drawing
  • New Residential Taps
Demo – Data Collection on an iPad
Utility-Scale mobile GIS

- A more productive workforce
- Accelerated collaboration
- A high return on investment