

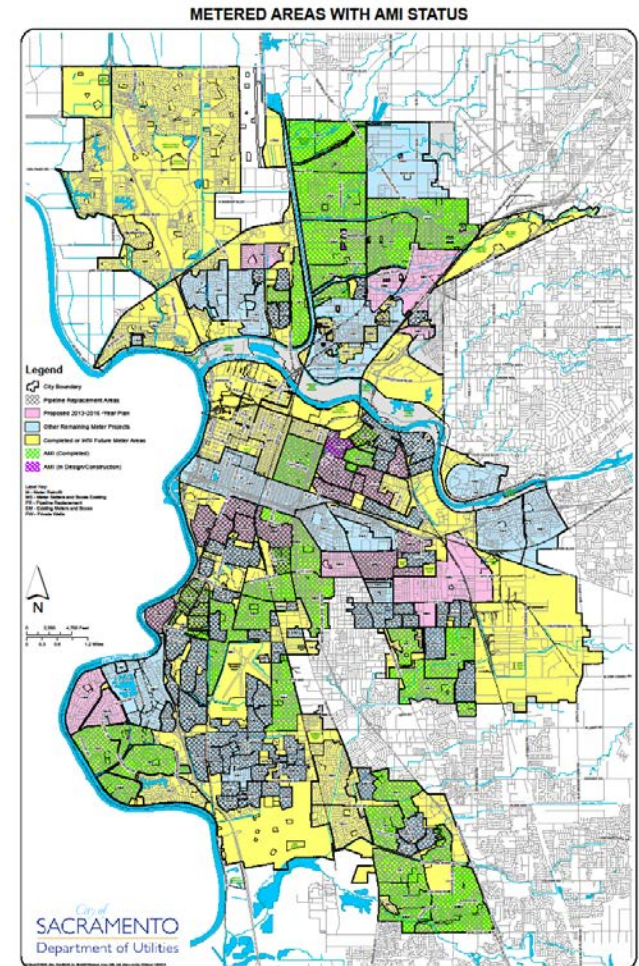
2015

ESRI WATER CONFERENCE

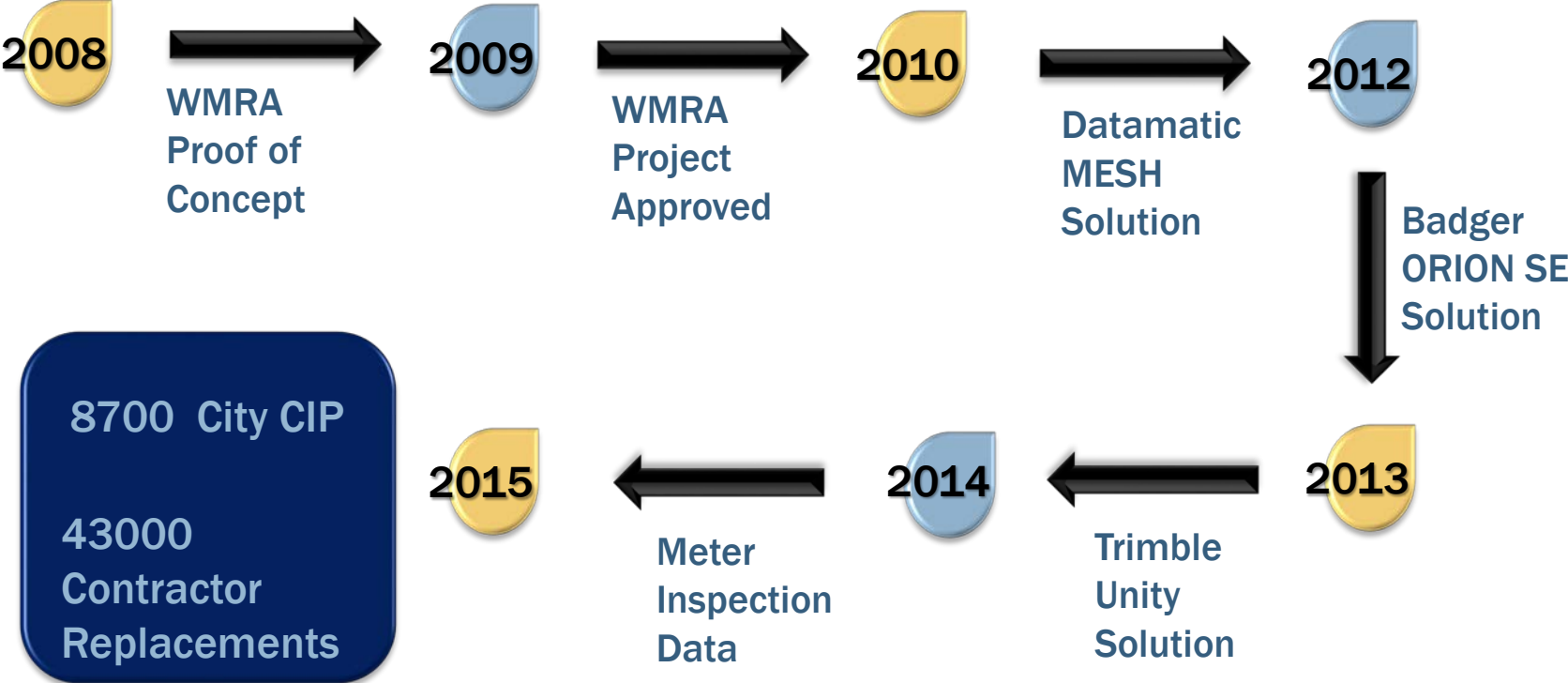
Increase Efficiency and Data Accuracy of Water AMI
Installations Using Cloud and Mobile GIS Technology

About Us

- 135,580 Service Connections
- 1,579 Miles of Water Pipe
 - ▣ 1,431 Miles Distribution Mains (< 14")
 - ▣ 148 Miles Transition Mains (> 16")
- 2 Water Treatment Plants
- 58% of City Metered



Project Background



Project Drivers

- Accelerated Water Meter Program
- Time-Sensitive AMI Replacement Program
- Streamlined AMI installation and meter inspection work
 - ▣ Eliminate paper based data collection process
 - ▣ Remove back office manual data entry and backlog of paper forms
 - ▣ Reduce error and time-consuming QA efforts
 - ▣ Decrease repeated trips to job sites



Project Objectives

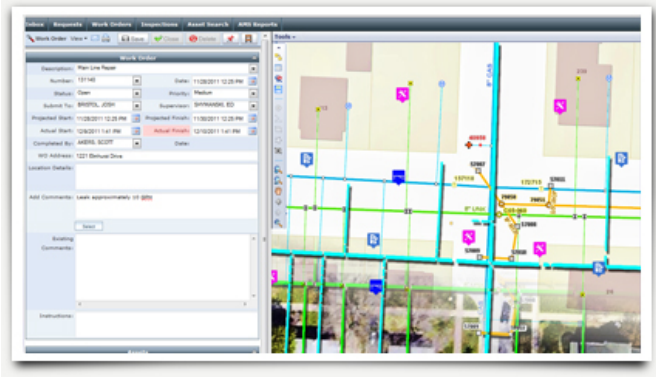
- Streamline field data collection activities
- Use a single handheld device in the field
- Single point of data entry to maintain data integrity and decrease percentage of error
- Streamline integration with back office systems including Esri GIS
- Improve tracking of AMI installation work in the City's CMMS (Cityworks)
- Accurately gather critical asset information including location information



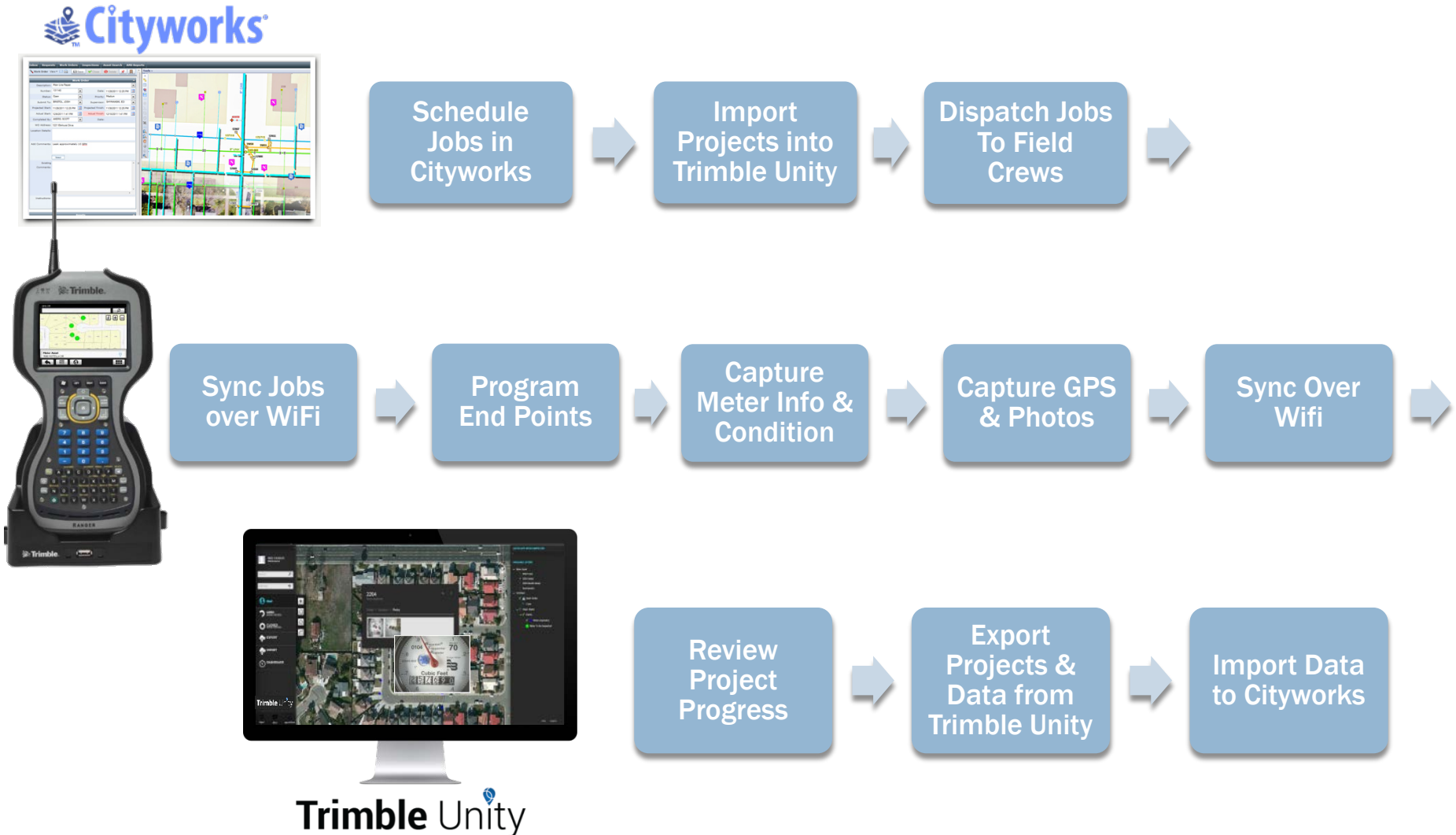
Solution: Trimble Unity

- Unified Cloud-based and Mobile Collaboration Suite of Applications for Smart Water Management, integrating:
 - ▣ Mobile workers and office professionals
 - ▣ Field and back office enterprise systems
 - ▣ GIS and field operations
 - ▣ Sensors and wireless communications
 - ▣ Utilities with their contractors
- Focus on workflow and business process improvement with the added benefit of better information for decision making
- Supports various mobile platforms and workflows

Integrated Software & Hardware

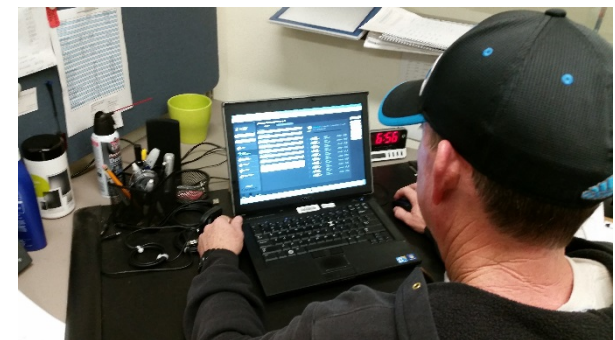


AMI Installation Workflow



Benefits & Outcomes

- ROI in 3 Months
 - ▣ Streamlined data collection activities
 - ▣ Single point of data entry
 - ▣ Reduced error & QA efforts
 - ▣ Single handheld device in the field
 - ▣ Eliminate repeated trips to job sites
- \$1.6M Total projected cost savings for the meter program
- Accurately gather additional asset information including GPS location information and assist with repair work
- Avoid liability issues by documenting water meter condition and taking photos to mitigate billing disputes



Future Plans

- Direct integration with Cityworks to eliminate manual Import and Export processes.
- Leverage the meter data and GPS positions captured in the field to update the City's GIS.
- Extend the use of the platform for various maintenance and asset inspection workflows.

Questions & Answers

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