

# Advanced (Water) Metering Infrastructure (AMI)

## Approval of a Purchase and Installation Agreement Proof of Performance Phase

City Council Meeting January 22, 2019



# Water System

Extensive & Complex System Covering Most of the City's Boundaries  
Water Deliveries Double in the Summertime

## System Overview

- 302 Miles of Potable Water Pipeline
- 202 Million Gallon Storage Capacity
- 26,550 Service Connections
- 17 Booster Pumps
- 42 Pressure Reducing Stations
- 2,723 Fire Hydrants
- 8,172 Distribution Valves
- 12 Interconnects with Local Agencies



## 2018 Water Delivery Facts

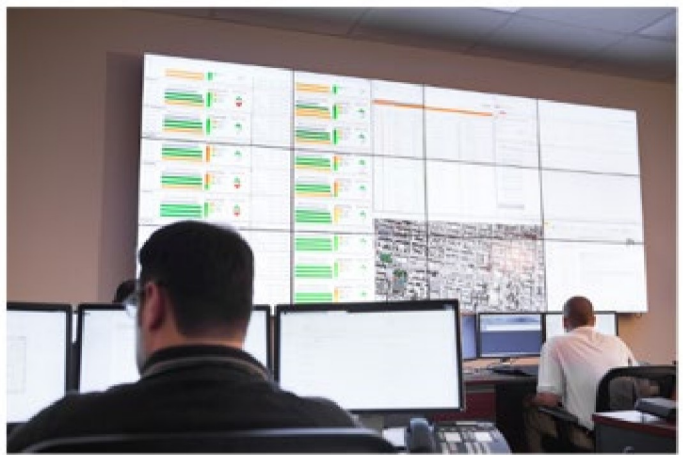
- 4.8 Billion Gallons Delivered (~15,000 acre feet)
  - 74% from 4 Local Groundwater Wells
  - 23% from 6 Import Connections
  - 3% from local Recycled Supplier

*Utilities Department*

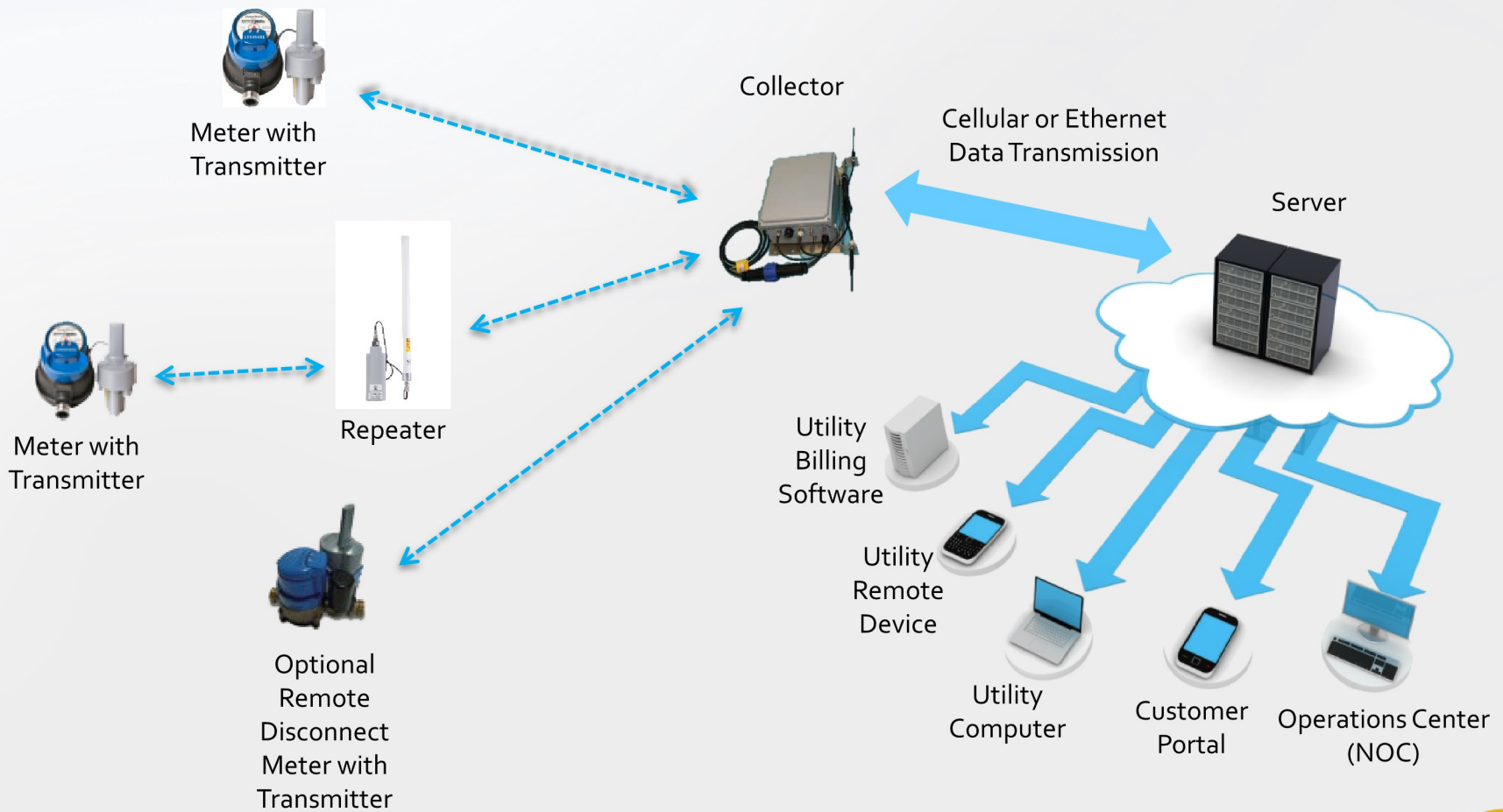


# Previously Presented to City Council on November 28, 2017

- Background
- What is AMI?
- Benefits
- Selection of AMI Vendor
- Project Description
- Cost of Project
- Funding
- Summary
- Questions



# AMI Water Meters are "Smart Meters"



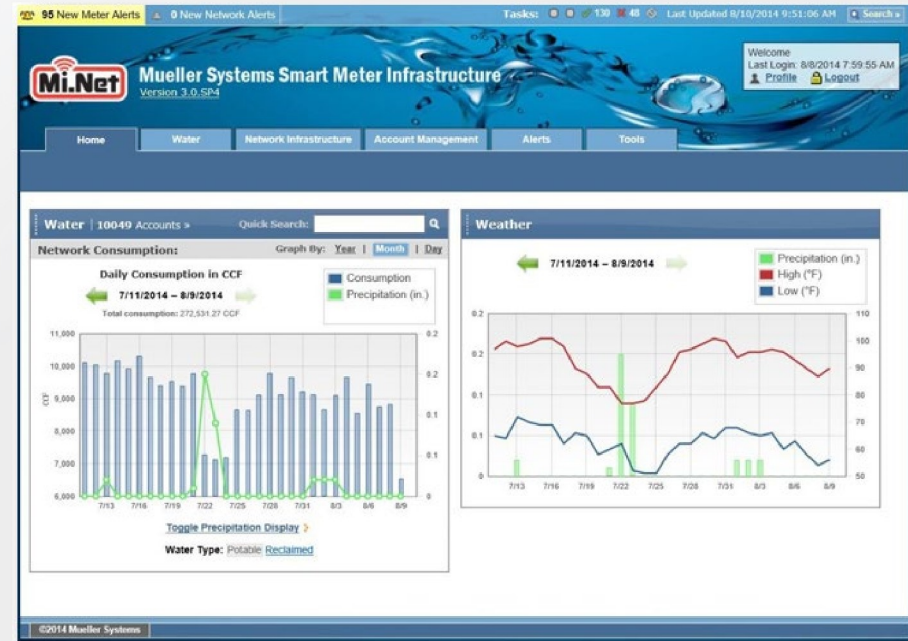
# AMI Benefits to be Evaluated During the Proof of Performance Phase (250 water meters)

- **Customer**

- Leak detection
- Interactive customer web portal
- Usage data & decisions

- **City**

- Customer service improvements & efficiencies
- On-demand meter reads
  - Reduces re-reads and field investigation trips
  - Reduced City and contract staff time in field
- Annual water meter reading contract savings
- Supports water conservation
- Replaces all meters including under-registering meters



# Project Description – Proof of Performance

## Two Phased Approach

### 1) Proof of Performance (Current Request)

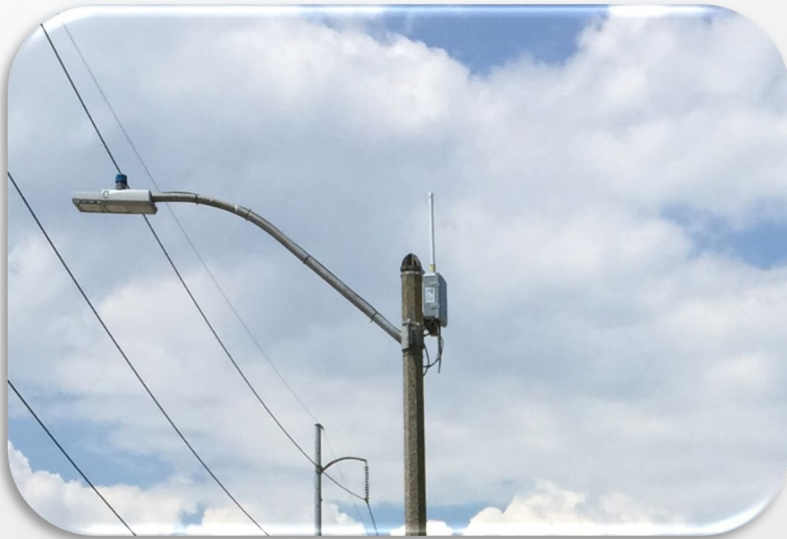
- Installation of 250 meters, 4 collectors, and 4 repeaters
- Test integration into City's billing system and customer portal
- Prove technology end-to-end
- Verify leak detection capabilities and staff efficiencies

### 2) Full Implementation – (Future City Council Consideration Item)

- 3+ year installation and phase in period
- Extensive public outreach
- Installation of remaining 25,000+ meters, collectors, and repeaters



# Proposed Collectors



# Proposed Repeaters



35.15277, -97.3936, 331.0m  
Sep 19, 2018 10:46:57 AM



# Selection of Mueller LLC as the AMI Vendor

## RFP and Selection Process

- Scope of Work was developed based on needs
- Six proposals received from highly qualified vendors
- Each vendor presented to the City's selection panel
- Extensive reference checks performed on all six vendors
- Top three were chosen based on technical scores and pricing
  - 70% technical and 30% cost
- Top three brought back for final interview with panel
- Mueller Systems, LLC scored highest and was selected



# AMI Costs

## ***Current Project***

- Proof of Performance Phase - \$191,123  
*(includes bonding and contingency)*
- Approved FY19 Capital Improvement Program Budget - \$3,300,300

## ***Future Project***

- Full Implementation cost ~\$9.5million
  - Future City Council discussion item along with the upcoming Water Master Plan and Water Rate Study



# ***Questions / Comments***

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