



ADVANCE METERING INFRASTRUCTURE CONTRACT AND PROJECT UPDATE

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OVERVIEW

- ❑ Nov. 2016 – Council approved \$23.1M for AMI
- ❑ May 2017 – RFP process began
- ❑ Oct. 2018 – Contract negotiations in progress
- ❑ Nov. 2018 – Prospective Council review for approval
- ❑ Dec. 2018 – Implementation kick off
- ❑ Dec. 2020 – Project completion

SESSION PURPOSE

- Seeking Council Direction regarding:
 - Contract to replace existing meters using AMI technology

AMI BACKGROUND

TECHNOLOGY OVERVIEW



Meters transmit
consumption data
4 times/day



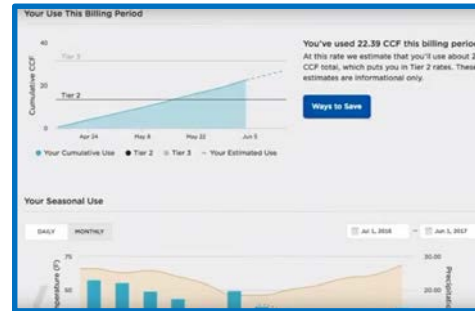
Servers process
information for
billing and
presentation to
customers



Customers and Utilities
representatives can view the latest
meter readings, usage history and
usage alarms

AMI BENEFITS

- Customers/ Efficiencies
 - Access to timely reads
 - Detect leaks earlier
 - Improve billing accuracy
 - Reduce manual readings
- Health/ Environment
 - Reduce CO₂ emissions by 50 tons
 - Avoid negative pressure contamination
- Attains \$2.3M net benefit
- Supports *Bellevue Smart*



AMI PROCUREMENT

CITY RFP REQUIREMENTS

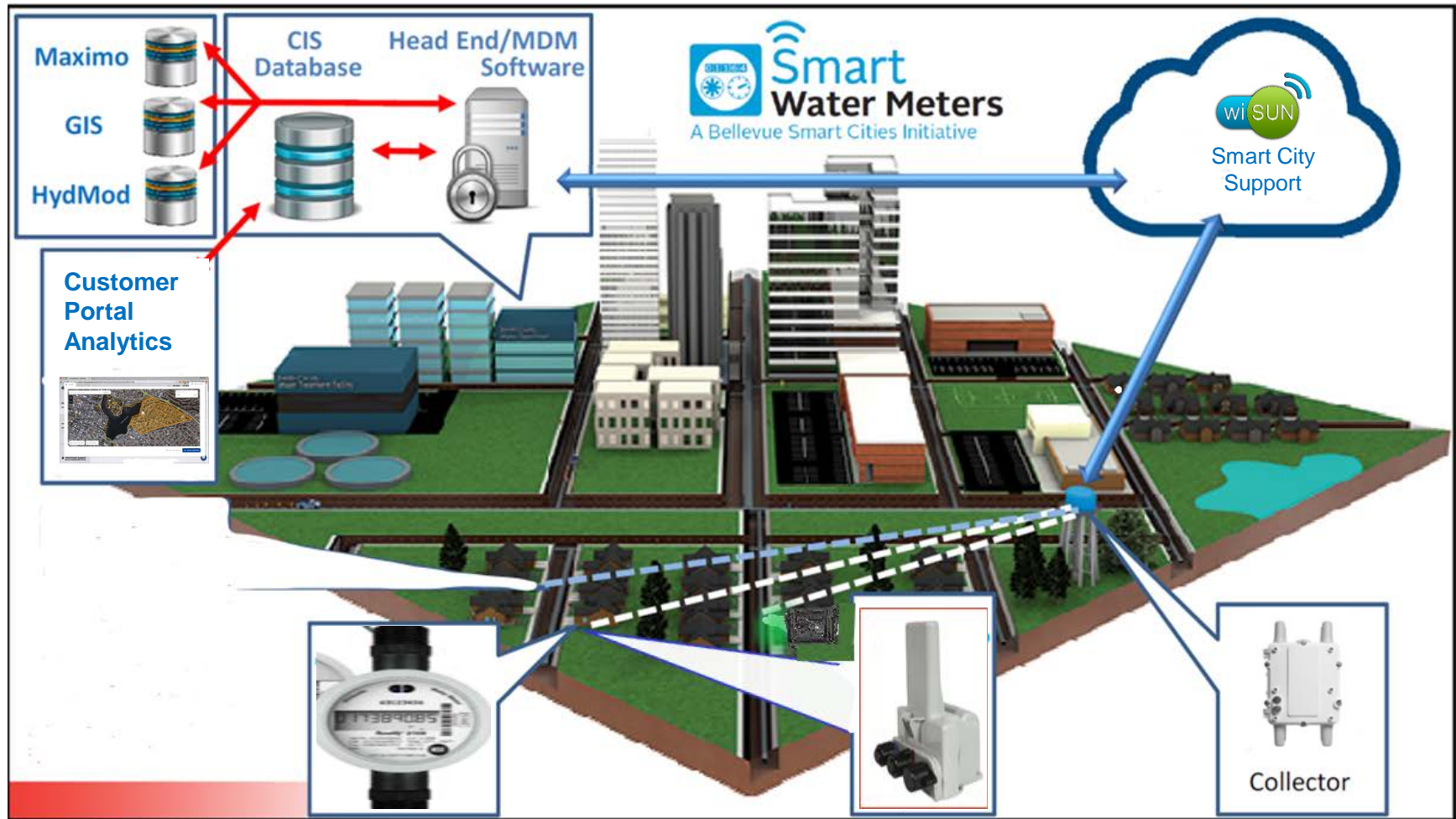
Identified Requirement	Vendor Compliance
Two-way communication	✓
Accurate meter reading	✓
Leak detection	✓
Customer portal	✓
<i>Bellevue Smart</i> support	✓
20-year system life	✓

ITRON – PROPOSED TECH PARTNER

- 40-year-old, Washington state-based company
- Primary focus is AMI for all utilities + smart city technologies
- Leads water utility market share with 30%
- Deployed 20 million water communications modules
- Supports 500 utilities with managed services



PROPOSED AMI SOLUTION



Smart water communication network available for future Smart City applications.

CUSTOMER PORTAL

- WaterSmart Software, San Francisco
- Provides portal services to 60 utilities in 15 states (e.g., Portland Water Bureau, Glendale Water and Power, Woodinville Water)
- Supports early-leak detection
- Targets messages to customers



Your Seasonal Use

Found a Leak

You have indicated that you have an Irrigation System leak.

Is there anything else you'd like us to know about your water use? 🗨️

Insert text here...

Submit

CONTRACT STRUCTURE

MASTER AGREEMENT

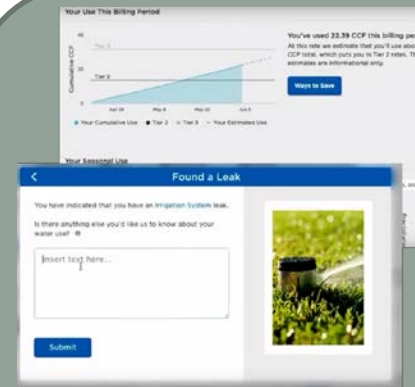
Hardware/ Installation



- Meters/ Radio Transmitters
- Communications Network
- Installation Services

1.5+ Years

On-going Services

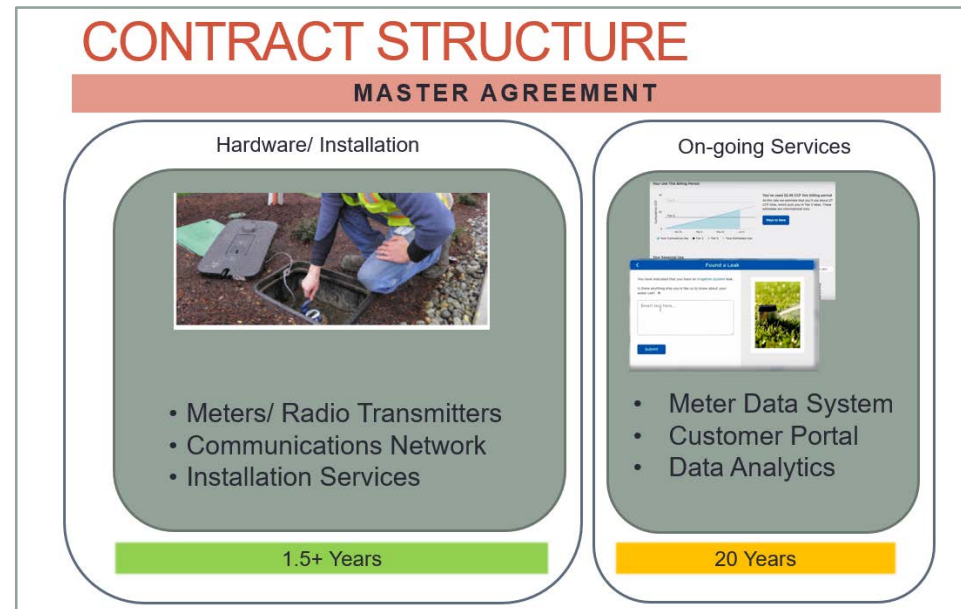


- Meter Data System
- Customer Portal
- Data Analytics

20 Years

KEY PROVISIONS

- 20-year services agreement
- Safeguards against technology obsolescence
- Best in class data security and privacy
- Industry standard equipment warranties



DATA SECURITY/ PRIVACY

- CISCO Systems cyber security
- Layers of protection for data
- No personally identifiable information (PII) on meters
- New customer portal to employ same PII security measures as City



CONTRACT VALUE & CITY IMPLEMENTATION

	Implementation Costs 2018 - 2020	Ongoing Costs 2021 -2038	Total Costs 2018-2038
Budget	\$ 23.1 million	\$ 2.6 million	\$ 25.7 million
Projected	\$ 19.6 million	\$ 5.6 million	\$ 25.2 million
Itron	\$ 15.6 million	\$ 5.6 million	\$ 21.2 million
City	\$ 4.0 million	\$ -	\$ 4.0 million

BUSINESS CASE COMPARISON

Technology Implementation	Original Business Case NPV	Updated Business Case NPV
Base Case	\$0	\$0
AMI	\$2.3M	\$2.7M

Business case remains a net positive

CUSTOMER COMMUNICATIONS

- 75% Utilities customers like AMI technology
 - No added cost,
 - Leak detection, and
 - Accuracy
- No opposition to AMI from early outreach with focus groups and on-line surveys
- Few concerns voiced on data privacy and costs



CUSTOMER COMMUNICATIONS

- ❑ Launched Smart Water Meter Program webpage
- ❑ Published article in the Annual Water Quality Report to all customers
- ❑ Provided presentations at Neighborhood forums and Business forums
- ❑ Provided multiple briefings at the Environmental Services Commission (ESC)



CUSTOMER COMMUNICATIONS

- ❑ Timely and proactive communications approach
- ❑ Multiple modes of communication (modern and traditional) during all phases
- ❑ Emphasis on outreach to diverse populations



NEXT STEPS

- ❑ Nov. 2018 – Contract to Council
- ❑ Dec. 2018 – Implementation kick off
- ❑ April/May 2019 – Limited Deployment
- ❑ Fall 2019 – Citywide Deployment
- ❑ Dec. 2020 – Project completion