



CITY OF MERCER ISLAND

UTILITY BOARD SPECIAL VIDEO MEETING

Tuesday, February 9, 2021 at 5:00 PM

BOARD MEMBERS:

Chair Tim O'Connell, Vice Chair Tom DeBoer
Board Members: Stephen Majewski
George Marshall, Stephen Milton,
William Pokorny, and Brian Thomas

LOCATION & CONTACT

Mercer Island City Hall – Zoom Meeting
9611 SE 36th Street | Mercer Island, WA 98040
Phone: 206.275.7706 | www.mercerisland.gov

In compliance with the Americans with Disabilities Act, those requiring accommodation for meetings should notify the Staff Liaison at least 24 hours prior to the meeting at 206.275.7706.

Virtual Meeting Notice

The virtual meeting will be broadcast live on Zoom and recorded and saved on the City's [YouTube Channel](#)

Join by Telephone at 5:00 PM: To listen to the meeting via telephone, please call **253.215.8782** and enter Webinar ID **853 1164 4385** and Password **132754** when prompted.

Join by Internet at 5:00 PM: To watch the meeting over the internet via your computer, follow these steps:

- 1) Click [this link](#)
- 2) If the Zoom app is not installed on your computer, you will be prompted to download it.
- 3) If prompted for Webinar ID, enter **853 1164 4385**; Enter Password **132754**

CALL TO ORDER & ROLL CALL, 5:00 PM

REGULAR BUSINESS

1. Code of Ethics Discussion
Recommended Action: Receive presentation.
2. ~~Approve the minutes of the December 8, 2020 Special Video Meeting~~
Recommended Action: ~~Approve minutes.~~
3. Meter Replacement Project Update
Recommended Action: Receive project update and provide feedback.
4. Utility Board Work Plan
Recommended Action: Review and approve the 2021 Utility Board Work Plan.

OTHER BUSINESS

5. Public Works Department Update
6. Board Member Reports

ADJOURNMENT



Code of Ethics

Abbreviated Training

February 9, 2021

Background

- Code of Ethics adopted 2018; amended December 2019
 - Officials comply with the laws and policies affecting the operations of government;
 - Official be independent, impartial and fair in their judgment and actions;
 - Public office be used for the public good, not for personal gain; and
 - Public deliberations and processes be conducted openly, unless legally confidential, in an atmosphere of respect and civility
- Code of Ethics amended and adopted December 2019
 - Improved the process for responding to a complaint, and added guidance on the acceptance of gifts, conflict of interest, representation of third parties, and misuse of public position and resources.
- Mercer Island City Code [2.60](#).



City Council Direction

- At the January 19, 2021 meeting, the City Council directed staff to:
 - Update the Code of Ethics for officials
 - Email all Board and Commission Members of the option to seek an informal opinion from the City Attorney on the applicability of the Code of Ethics to “hypothetical circumstances and/or situations solely related to the official making the request.”
 - Attend all Board and Commission meetings to review the informal opinion purpose and process.
 - Develop and deliver training on the revised Code of Ethics for all Board and Commission Members by April 2021.*

*Training date is dependent on adoption of revised code of ethics.



City Attorney – Informal Opinions

- Board and Commission Members may seek an informal opinion from the City Attorney
 - Applicability of the Code of Ethics to “hypothetical circumstances and/or situations solely related to the official making the request.” (MICC 2.60.060)
 - Wondering whether certain actions violate the Code of Ethics, contact City Attorney Bio Park (bio.park@mercerisland.gov), and submit your inquiry in writing.
 - The City Attorney will follow up with you if he needs additional information to give his opinion and advise you on the matter, or he may forward your inquiry to City’s Ethics Officer for an advisory opinion.
 - **NOTE:** Your communication seeking informal opinion from City Attorney may not be protected under attorney-client privilege.



Next Steps

- Code of Ethics Revisions
 - Your comments or suggestions are welcome – Contact Chief of Administration Ali Spietz at ali.spietz@mercerisland.gov
 - Discussions with City Council on code revisions will begin in March
- Code of Ethics Training
 - Board & Commission Members training on the revised code of ethics is anticipated to begin no later than April 2021*

*Training date is dependent on adoption of revised code of ethics.





Memorandum

CITY OF MERCER ISLAND, PUBLIC WORKS DEPARTMENT

9611 S.E. 36th St. • Mercer Island, WA 98040-3732
(206) 275-7608 • FAX: (206) 275-7814
www.mercerisland.gov

Date: February 4, 2021

To: Utility Board

From: Jason Kintner, Chief of Operations/Public Works Director
Allen Hunter, Utility Operations Manager
Maya Giddings, CIP Project Manager

Re: Meter Replacement Project Update

BACKGROUND:

More than 60% of the City's existing water meters are 15 years or older. Water meter accuracy is the greatest at the beginning of its life and degrades with age and use. With an aging utility, a standardized replacement program is needed. The water system currently has a wide array of water meter manufacturers, types, and reading technologies of varying age. To assist with the evaluation of the City's meter replacement program, the City retained HDR to perform an analysis, provide recommendations on standardizing the meter program, and aid in the development of a Request for Proposal ("RFP") process.

METER REPLACEMENT RFP:

The City issued an RFP in June 2019. The RFP included proposals to provide either an Automated Meter Reading (AMR) system or an Advanced Metering Infrastructure (AMI) system for the City's water utility. Each Proposal included vendors to furnish/install meters and transmitter units, data collection and management and required integration with the City's billing system. Additionally, each proposal was to be designed to an expected useful life of at least 20 years.

The City received nine proposals. An Evaluation Committee, including representatives from Public Works, Finance, Community Planning & Development, as well as Information Services Departments reviewed each proposal, completed interviews, and performed reference checks with other jurisdictions. Following this review, two vendors were selected to complete a small pilot installation to test the meter and data platforms (November 2019).

While many proposals clearly demonstrated an ability to provide a standardized meter replacement program for Mercer Island, Ferguson/Sensus was identified as the preferred vendor and contract negotiations are currently underway. On Tuesday night, staff will provide an update on the project and discuss the upcoming project schedule.



AMI Meters, Project Updates: Booster Station & Risk Resiliency

February 9, 2021

Presentation Overview

- Review AMI Water Meter project
 - Background
 - Project Evolution
 - Project Update





AMI Water Meters

Overview of Water

- Water supplied by SPU
- Two, 4-million-gallon reservoirs
- Two booster pump stations
- 115 miles of watermains
- 85 pressure reducing valves (PRV) stations
- 7,866 water meters in service
 - 1,196 meters: <5 years old
 - 794 meters: 5-9 years old
 - 914 meters: 10-14 years old
 - 5,052 meters: ≥15 years old



Drivers for Replacing Meters

- Aging meters
 - 64% > 15 years old
- Improve accuracy
 - 82% of meters read manually
- Better manage water loss
- Reduce sources of lead
- Create standard for replacing meters



Meter Options

1) Manual / Touch Read

- Requires physical visit to each meter location
- Reading once per billing cycle

2) Automated Meter Reading (AMR)

- Radio transmitters connected to each meter
- Information obtained by driving/walking route (no need to stop at each meter location)
- Reading once per billing cycle

3) Advanced Metering Infrastructure (AMI)

- Radio transmitters connected to each meter (fixed network)
- Information sent to data collection network
- Information sent multiple times per day

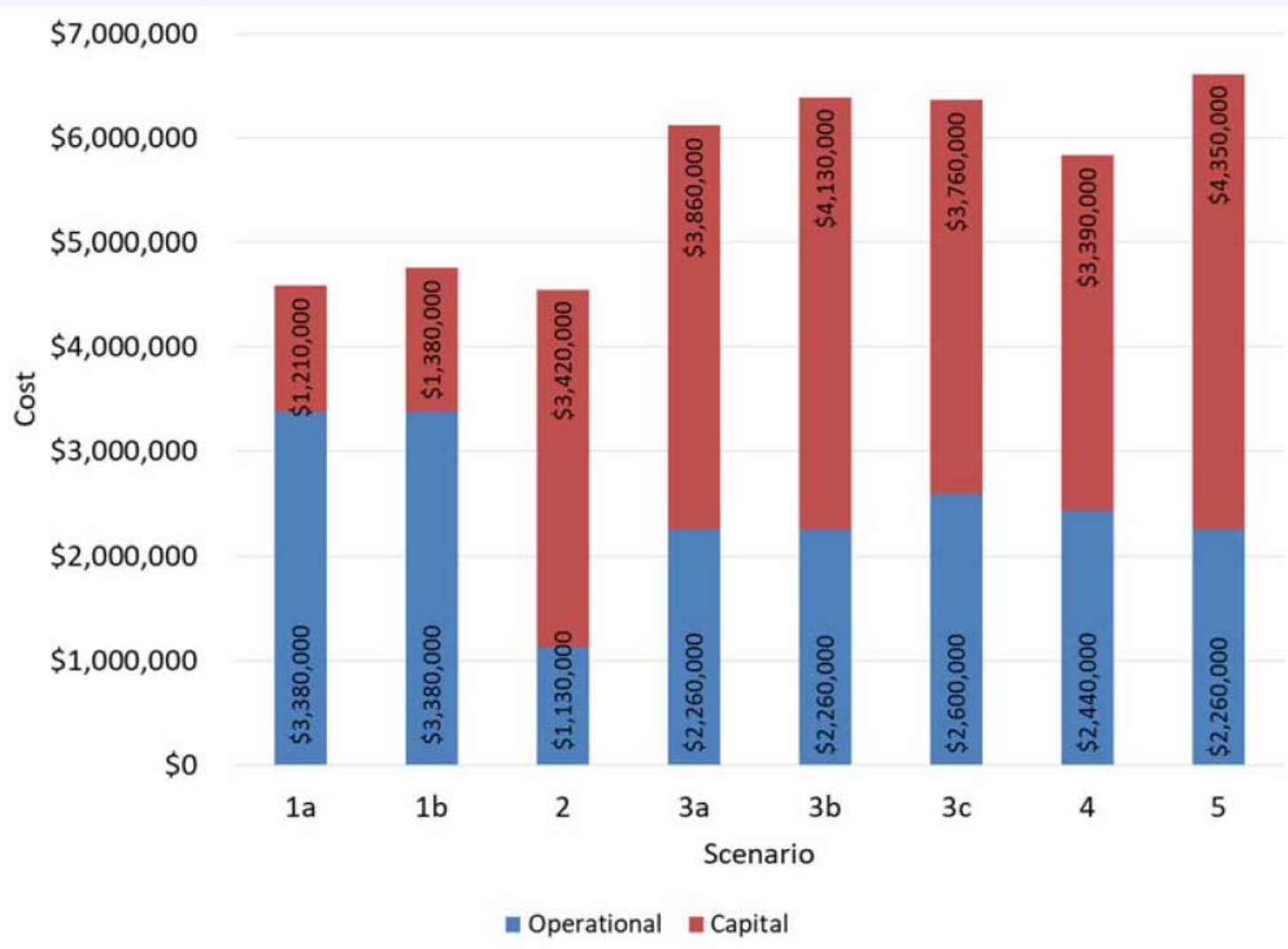


Meter Evaluation

- HDR Engineering
- Looked at 5 scenarios
 1. Scenario 1 – Manual
 - a) Mechanical meters
 - b) Solid State (electronic) meters
 2. Scenario 2 – AMR (1 year deployment)
 3. Scenario 3 – Mechanical AMI (1 year deployment)
 - a) Standard power
 - b) High power
 - c) Network as a service
 4. Scenario 4 – Mechanical AMI (3year deployment)
 5. Scenario 5 – Electronic AMI (solid state meters)
- Analyzed and evaluated meter options



Cost Model



Comparison of Models

Parameter	Manual Read	AMR Mobile System	AMI Fixed Network
“Freeing up” of Staff Resources	--	+	++
Resolution of Available Data	--	+	++
Support of Conservation Activities	0	+	++
Support to Leak Adjustment Processes	-	+	++
Utility “Visibility” to Customers	+	0	--
Meter Access/Reader Safety	--	+	++
Public Perception (Technology vs. Manpower)	--	++	++
Environmental Impact (Carbon Footprint)	--	-	++

Notes:

--: Strongly negative impact

-: Negative impact

0: No impact

+: Positive impact

++: Strongly positive impact



Summary of Analysis

Quantitative (Costs)

- Manual Read has lowest 20-year cost
- AMR costs similar to Manual Read
- AMI has higher costs
 - All options all have similar costs
- 20-year present value costs for AMI are ~33% greater than Manual Read

Qualitative (Benefits)

- AMI has higher costs, but significant benefits
 - Monitoring and managing water demand
 - Supporting leak detection and other conservation goals
 - Providing real-time information to support customer service
 - Customer portals to support customer water use tracking



AMI Meters

- RFP in June 2019
- Scope of Work
 - Furnish/install meters & transmitter units
 - Furnish/install AMI data collection system
 - Furnish Meter Data Management System
 - Integrate AMI system w/ City's billing system
- Received 9 proposals
- Pilot Study
- Selected Ferguson/Sensus



Next Steps

- Contract negotiations
 - Contract Finalization complete in June 2021
- Propagation Study
 - Evaluate placement for transmitter units
- Construction starting in Q3 2021
- Construction considerations

Questions?





Utility Board

2021 Work Plan

2nd Tuesday

Meeting Date	Agenda Item
January 12	Recess (Meeting Canceled)
February 9	Code of Ethics Discussion
	Adopt 2021 UB Work Plan
	Water Meter Replacement Contract & Project Update
March 16 (Special)	Joint Utility Board & City Council Meeting
	Risk & Resiliency, Meter Replacement and SCADA Project Updates
April 13	NPDES Annual Report
	Sustainability Work Plan Update & PW Projects
May 11	Risk & Resiliency & ERP Report
June 8	Board Elections
	Booster CL2 Project Update & Authorization
July 13	PW Facilities Tour
	2021 CIP Updates
August 10	Recess
September 14	Stormwater & EMS Rate Discussion/Recommendation
October 12	Sewer & Water Rate Discussion/Recommendation
November 9	Recology Solid Waste Annual Report
December 14	Recess
To Be Scheduled:	COVID/EOC Lessons Learned
	SPU Wholesaler Contract Ammendment Updates
	KC Metro Rate Updates