Advanced Metering Infrastructure

Project Update

Nav Otal Utilities Director February 7, 2022



Council approval is needed to implement lees to be paid by customers opting out of Alvir to cover program costs. Stan seeks direction to return with



Council Direction

Staff seeks direction to return with appropriate legislation to adopt proposed AMI Non-Communicating Water Meter Service Program "Opt-Out" fees.



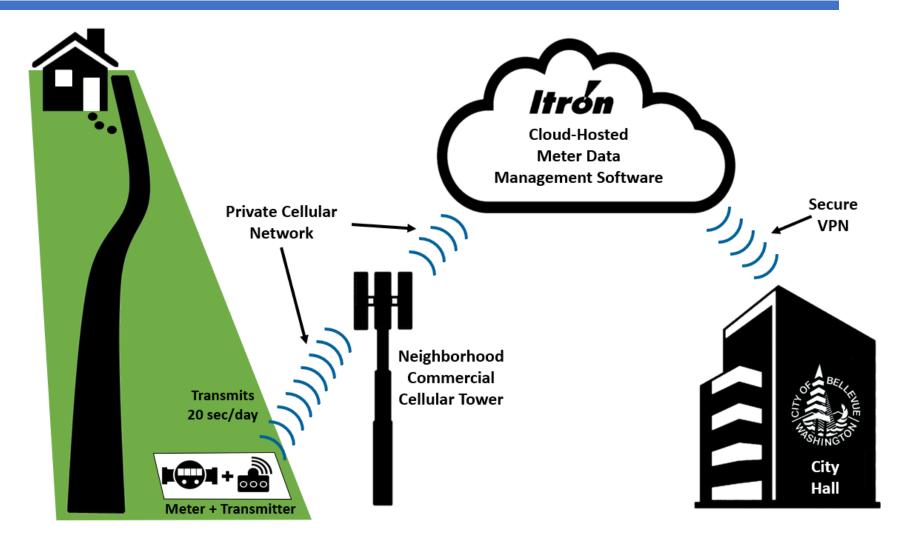
AGENDA

- 1. AMI System Overview
 - 2. Project Update
 - 3. Non-Communicating Water Meter Service Program (Opt-Out)





AMI System Overview



AMI System—Safety & Security

Approved by regulatory agencies

- Meter certified for potable water use
 - National Science Foundation (NSF/ANSI 61)
 - American Water Work Association (AWWA C-708)
- Cellular transmitter certified for operation
 - Federal Communications Commission (FCC Part 15-C)

Security & Privacy

- No customer information stored on meter or transmitter
- Consumption data transmitted on secure private cellular network
- Consumption data is only correlated to customer account behind City of Bellevue secure firewall





Customer Value

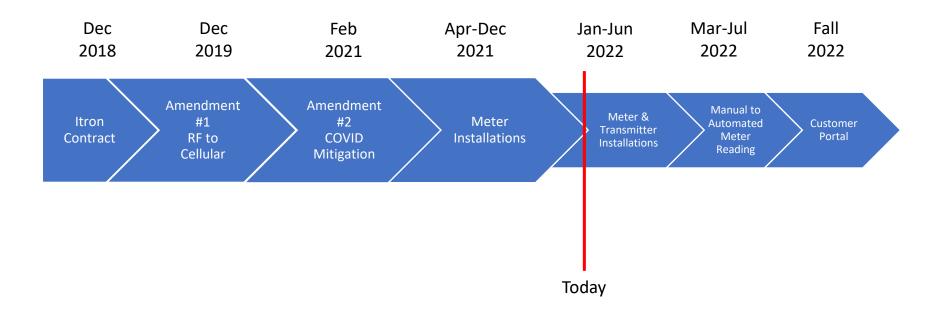
- Customer control of water bills
 - Monitor usage
 - Early leak detection
- Ensure water quality
- Reduced carbon footprint
- Reduced Utility costs
 - Reduce system leaks
 - Optimize pumping energy





Project Milestones

2018 - 2022





Meter Only Deployment

- All large meters (3" or greater) completed
- Replaced 22,000 meters
 - 55% of customer accounts





Cellular Transmitter Delay

- Delivery delayed 6 months
- Installations delayed from Aug 2021 to Feb 2022



Cellular Transmitter

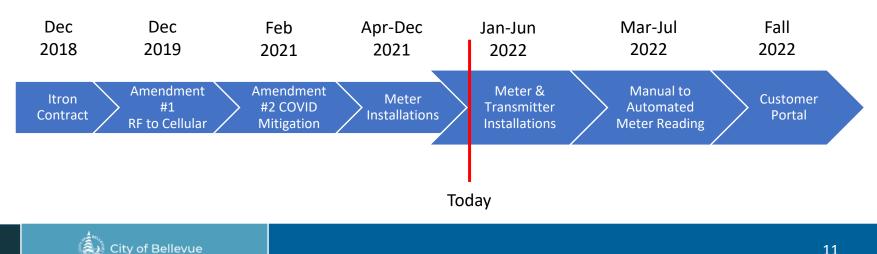
- July 2021 Tested 48 'Beta' prototype units
 - Verified basic functionality and cellular network
- February 2022 Testing 8 'First Article' production units
 - Verify full functionality of transmitter, cellular network and billing system integration





Next Steps

- Install remaining digital meters
- Begin transmitter installations
- Transition from manual to automated meter reading
- Customer Portal available late Fall 2022





Non-Communicating Water Meter Service

(AMI Opt-Out Option)



Why Offer an Opt-Out Option

- Customer perceived concerns
 - Health
 - Privacy
- Utility responsiveness to customers



Opt-Out Considerations

- AMI is the new standard for Bellevue Utilities
- Opt-out from AMI could be offered, as a courtesy, on a transitional basis:
 - By request, during project implementation
 - For *existing* single-family residential customers
- Opt-out program will sunset in 5 years



Impacts to Customers who Opt-Out

- No access to near real-time water consumption data
- Unable to receive important automatic alerts
 - Leaks
 - Backflow
- Not eligible for leak adjustments
- Additional cost



Impacts to the Utility

- Required to maintain manual reading capability
 - Field Staff Time
 - Vehicles
- Additional administrative coordination
- Modified billing process
- Coordination with AMI contractor
- Future re-installation effort



Fees

\$80 One-time application/processing fee

- Application review, coordination with customers
- Billing system changes
- Coordination with installers and field staff
- Future installation of transmitter

\$30 One-time transmitter removal fee*

*waived if transmitter has not been installed yet

\$15 Recurring fee per manual meter-reading

Currently every two months





Environmental Services Commission Recommendation on AMI Opt-Out

Vanja Knezevic - Chair



Council approval is needed to implement lees to be paid by customers opting out of Alvir to cover program costs. Stan seeks direction to return with



Council Direction

Staff seeks direction to return with appropriate legislation to adopt proposed AMI Non-Communicating Water Meter Service Program "Opt-Out" fees.







