

April 4, 2016

CITY COUNCIL STUDY SESSION ITEM

SUBJECT

Feasibility Study of Advanced Metering Infrastructure

STAFF CONTACT

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POLICY ISSUES

As part of Bellevue's Smart City initiative, Bellevue has begun to identify and evaluate new technologies that support the Council's vision of a high quality environment, connectivity and improved customer service. One such technology is Advanced Metering Infrastructure which utilizes wireless communications to transmit water consumption data from a water meter to an information system.

DIRECTION NEEDED FROM COUNCIL

☐ Action
☒ Discussion
☒ Information

This briefing is to update Council regarding a feasibility study conducted by CH2M Hill on Advanced Metering Infrastructure, including an analysis of both financial and nonfinancial benefits of implementation. No decisions are required now, and the briefing is intended to provide an opportunity for Council to develop a more in-depth understanding of the topic in preparation for budget discussions later this year.

BACKGROUND/ANALYSIS

Advanced Metering Infrastructure (AMI) is a technology which utilizes wireless communications (e.g., radio frequency or cellular communications) to transmit water consumption data from a water meter to an information system, which is readily accessible to the public. AMI technology provides a number of benefits to customers, including but not limited to:

- Hourly water consumption data available to customers to help inform usage and promote conservation
- Improved accuracy of water consumption data for billing
- Proactive leak detection
- Reduced operational costs and greenhouse gas emissions due to reduction in driving and other activities to conduct manual meter reading
- Improved customer service through on-demand meter reads
- Ability to provide alerts for potential contamination due to water flowing back into the system (backflow)
- Data availability for hydraulic modeling analysis and demand management
- Potential for future nexus with other Smart City initiatives.

The presentation will explore several different technology solutions and the financial costs as well as the projected monetary and non-monetary benefits of implementing one of the new technologies. The

presentation will also include an estimate of the direct costs and benefits to the customer. Finally, a proposed implementation timeline will be recommended, along with an anticipated capital cost for inclusion in the 2017-2018 budget.

ALTERNATIVES

N/A

RECOMMENDATION

N/A