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# 191517

Ordinance

## Authorize solicitation and execute multiple contracts required to implement advanced metering infrastructure and a new customer engagement portal for City utility accounts for amount not to exceed \$76 million

Passed

The City of Portland ordains:

Section 1. The Council finds:

1. Portland Water Bureau currently collects customer consumption data for City-provided sewer/stormwater/water services manually, generally once every three months.
2. The infrequent collection of consumption data creates challenges for prompt leak identification, is a barrier to moving to monthly billing, and does not allow the City to provide customers with usage data that could help them better manage their utility costs.
3. Portland Water Bureau and the Bureau of Environmental Services (collectively, City Utility Bureaus) are undertaking the Advanced Metering Infrastructure (AMI) Project (Project) to replace or upgrade existing manual City utility meters with digital meters and implement new technology systems that will automatically collect customer consumption data from every account every day.
4. The Project will create operational efficiencies for the City Utility Bureaus and give customers new information to better manage their utility costs.
5. Project implementation involves three separate procurements: a request for proposals (RFP) for AMI systems and installation, an RFP for a new online and mobile customer self-service platform, and an invitation to bid for the digital meters and meter parts needed to upgrade existing meters that will be retained.
6. Each of the three solicitations for procurement action to implement the Project will use the City's standard goods and services procurement processes.
7. Total estimated cost for the three procurements is \$76,000,000.

Introduced by

[Commissioner Mingus Mapps](#)

Bureau

[Water](#)

Contact

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Requested Agenda Type

Regular

Date and Time Information

Requested Council Date

November 8, 2023

8. Funding for this Project, with budgeted contingency, is available in the fiscal year 2023–24 budget and the long-term capital plans for both City Utility Bureaus.

NOW, THEREFORE, the Council directs:

- A. Procurement Services is authorized to solicit for new digital meters and components required to upgrade existing meters.
- B. Procurement Services is authorized to solicit for AMI technology systems and the installation of the new digital meters, software, and related infrastructure.
- C. Procurement Services is authorized to solicit for a new customer engagement portal software system, and all related implementation services.
- D. For each of these procurements, upon the Council's acceptance of the Chief Procurement Officer's Report to Council, the Chief Procurement Officer is authorized to negotiate and execute the contracts for a cumulative amount not to exceed \$76,000,000, provided the contracts have been approved as to form by the City Attorney's Office.

An ordinance when passed by the Council shall be signed by the Auditor. It shall be carefully filed and preserved in the custody of the Auditor (City Charter Chapter 2 Article 1 Section 2-122)

Passed by Council  
November 8, 2023

Auditor of the City of Portland  
Simone Rede

## Impact Statement

### Purpose of Proposed Legislation and Background Information

Portland Water Bureau provides customer service functions – meter reading, billing and payments, customer assistance – for the City's water, wastewater, and stormwater customers. Portland Water Bureau currently reads approximately 188,000 meters manually, generally once every three months, and uses multiple software programs to provide online customer self-service functions in English and Spanish.

Reading meters once every three months poses challenges for City utility bureaus and their customers. Infrequent reads can leave leaks undetected for up to 90 days, which results in unnecessary water loss, high bills, and lost City revenue. Quarterly manual reads are a key barrier to moving to monthly billing and limit the City's ability to provide customers with usage data that could better help them manage their utility costs.

Portland Water Bureau, in partnership with the Bureau of Environmental Services, is leading a project to implement advanced metering infrastructure (AMI) and a new online and mobile customer self-service platform. The Advanced Metering Infrastructure Project (Project) involves replacing or upgrading existing manual water meters with digital meters and implementing new technology systems to automate collection of consumption data from every meter, every day. The project also includes consolidating online customer services that are currently provided using four separate systems into a new accessible, multi-lingual online and mobile customer engagement portal.

This legislation authorizes the solicitation process and contract award for three goods and services procurements required to deliver the Project. The current Project schedule has all three procurements complete by spring 2025; the transition from manual meter reading to AMI would be phased in across the City between 2025 to 2030.

### **Financial and Budgetary Impacts**

This legislation will authorize three solicitations and contract awards that represent \$76,000,000 of the total \$91,000,000 estimated project costs. Level of confidence in the project cost estimate is low based on the guidelines detailed in the City's Project Estimate Confidence Level Rating Index.

The first procurement action will be the purchase of digital meters or the components needed to upgrade existing meters. The cost is approximately \$16,000,000. This full-scale replacement or upgrade to all meters is an up-front expenditure of asset renewal costs that would ordinarily be spread over 20 – 30 years. After full implementation in 2030, annual meter replacement costs would be lower than typical for the 20-year life of the new digital meters.

The second procurement action will be for AMI installation services (meters and radio transmitters, communications network, software needed to collect and analyze data) with an estimated cost of \$59,000,000. There will be annual operations and maintenance fees associated with the new system, which are estimated to be \$800,000 to \$1,100,000 per year to cover warranty, meter infrastructure service, and software licensing and support. The system has a 20-year lifespan, after which it will need to be replaced.

The third procurement action will be to implement the new customer engagement portal is \$500,000, with a new annual licensing and support fee estimated to be \$200,000 to \$400,000 per year.

After full implementation, it is estimated that the remaining manual meter reading activities will require 4.5 full time staff and vehicles, representing annual costs savings of almost \$1,800,000. However, surplus Meter Reader and Meter Inspector positions will be reclassified, and existing staff

redeployed to support other Portland Water Bureau priorities. The Project will not result in staff redundancies.

The Project will be delivered over seven years. Funding for next year's costs is included in the Portland Water Bureau and Bureau of Environmental Services FY 2023-24 Budgets. Funding for the full seven years is included in each utility bureau's long term capital plan and will need to be included in future annual budgets until the Project is complete.

## **Community Impacts and Community Involvement**

The Project will impact every City utility customer, as the Project will change the way customer usage data is collected, increase the transparency of usage data and billing, and improve the quality and range of services available through online customer service.

All 188,000 of the City's water meters will be serviced – those with significant residual life will be upgraded and those nearing their end of service will be replaced. As a result of the reduced lag in data collection and the higher resolution of the meter readings, all consumers will have access to information that will help them identify and address water related issues such as service leaks that lead to high bills.

Every customer will have access to a customer engagement portal that allows them to monitor water consumption, pay water and stormwater/wastewater bills, start, stop, and move service, sign up for e-bills and autopay, receive automated alerts (e.g., high usage, potential leak), request a rebate or a kit, and enroll in Portland Water Bureau and Bureau of Environmental Services programs including financial assistance and Clean River Rewards. The portal will be available through internet, tablet, and smart phone devices to ensure broad accessibility. Specifications will favor systems that are able to support various languages as well as people with physical and visual challenges.

The Project intends to consult directly with customers/end users and focus communities on design and implementation of the new systems.

AMI will be implemented across the City over four years. The phasing strategy will be developed with an awareness of under-served and under-represented populations. The team intends to use the Justice 40 Climate and Economic Screening Tool to identify specific neighborhoods within Portland's service area that have been adversely impacted by climate change or water service issues in the past.

Based on AMI implementation elsewhere, the Project will likely receive criticism from customers or stakeholders that are concerned about the perceived health impacts of digital meters, as well as potential data security and surveillance.

It is not anticipated that groups will testify for or against this Project.

## 100% Renewable Goal

Digital meters will provide the City utility bureaus more insight into customer demand and consumption, which can provide operational guidance to help the bureaus run the systems more efficiently. This may lead to decreased energy usage for the collection, transmission, treatment, and distribution of water, and the amount of energy used to collect, transport, and treat wastewater at key times.

## Budget Office Financial Impact Analysis

This ordinance represents a joint effort between PWB and BES over the next seven years. This ordinance requests the authority to solicit and award \$76 out of \$91 million of the estimated project costs. This would be broken up into three solicitations and awards. The first procurement would be ~\$16 million for digital meters and associated components; the second award would be for ~\$59 million for AMI installation services; the third award would be for \$500,000 for a new customer engagement portal. Each of these solicitations has associated annual costs that the bureaus have taken into account. The funding for this project is included in both bureau's five-year CIP.

## Agenda Items

911 Time Certain in [November 1, 2023 Council Agenda](https://www.portland.gov/council/agenda/2023/11/1)  
(<https://www.portland.gov/council/agenda/2023/11/1>)

Passed to second reading

Passed to second reading November 8, 2023 at 9:30 a.m.

946 Regular Agenda in [November 8, 2023 Council Agenda](https://www.portland.gov/council/agenda/2023/11/8)  
(<https://www.portland.gov/council/agenda/2023/11/8>)

Passed

Commissioner Mingus Mapps Yea

Commissioner Carmen Rubio Absent

Commissioner Dan Ryan Yea

Commissioner Rene Gonzalez Yea

Mayor Ted Wheeler Yea