

Implementation Strategy for a Modern Utility Billing System

Date: June 30, 2026

To: Infrastructure and Environment Committee

From: General Manager, Toronto Water, General Manager, Solid Waste Management Services, and Director, Revenue Services

Wards: All

SUMMARY

This report responds to City Council's direction from November 2025 ([2025.IE25.4](#)) for the General Manager, Toronto Water, in consultation with the General Manager, Solid Waste Management Services, Director, Revenue Services, the Chief Financial Officer and Treasurer, and the Chief Technology Officer, to retain a billing systems industry expert to assist in:

- a) gathering requirements, analyzing options and preparing a recommendation for a modern utility billing system;
- b) establishing a governance framework to ensure alignment of needs and responsibilities;
- c) developing a detailed implementation and procurement strategy in alignment with the work underway as part of recommendation 1 (align billing system Advanced Metering Infrastructure (AMI) implementation strategies); and
- d) reporting back to Infrastructure and Environment Committee by Q2 2026 the resulting recommendation and implementation plan for a modern utility billing system, as well as funds necessary to support the implementation.

In 2026, Toronto Water retained a billing systems industry expert to support this work. In order to ensure a new billing system would meet the needs of the City, Toronto Water established a multi-divisional steering committee and a working group to develop a comprehensive framework to guide this work. The working group participated in a series of workshops led by the industry expert to assess the current utility billing process and determine areas of improvement. Staff also reviewed procurement options and implementation strategy to align with ongoing meter transmission unit (MTU) replacements and next generation water metering [Advanced Metering Infrastructure (AMI)] implementation.

After analyzing the current system and collecting feedback from the steering committee and the working group, Toronto Water, Solid Waste Management Services, Revenue Services, and Technology Services plan to replace the City's legacy Water Management and Collection System (WMACS) with a modern utility billing system and billing portal. WMACS was implemented in 1999 and has become increasingly inefficient due to aging technology, limited integration capability and manual workarounds. Consistent with recommendation of an AMI industry expert that Toronto Water retained from 2024-2025 to develop the strategy for next generation water metering ([2025.IE25.4](#)), staff plan to replace the utility billing system before the installation of AMI meter transmission units (MTUs), currently planned to begin field deployment by 2032. This sequencing reduces the risk of implementing two major systems at the same time and ensures the modern utility billing system is ready to support future AMI functionality.

Initial implementation will focus on replacing core WMACS functionality with a stable, modern and reliable utility billing system, while enabling customer service improvements through a modern billing portal. The billing portal will offer customers immediate value through self-service access to billing information, payment options, billing preferences, paperless billing, alerts, and reminders. The portal would also allow customers more flexible options, including the ability to have separate bills or combined bills (as they are now). This improvement would reduce customer confusion and enhance overall operational efficiency. Additionally, the self-serve nature of the billing portal is also expected to reduce routine call volumes, decrease reliance on paper-based processes, improve reporting, and strengthen access to billing data.

Additional improvements, including automation and system enhancements, will be addressed through later phases once a modern utility billing system and portal are in place. This phased approach is designed to manage risk, ensure operational continuity and organizational readiness, and allow staff time to adapt, while supporting the City's broader modernization and maintaining critical AMI timelines.

Replacement of WMACS with a modern utility billing system and billing portal is expected to take approximately five years and would consist of the following key steps:

- 2026-2027: Retain an industry advisor to support the procurement and implementation planning for a modern utility billing system and billing portal
- 2027-2028: Procure a modern utility billing system that supports the City's rate-based divisions and facilitates future enhancements, as well as a billing portal that meets customer expectations and aligns with corporate strategy from overall customer experience perspective.
- 2028-2029: Procure system integration services to configure and integrate the selected modern utility billing system and portal.
- 2029-2031: Implement a modern utility billing system and portal and switch over from the existing WMACS billing system. This step must be completed after the ongoing MTU replacements (expected to complete in 2028), and before the end of 2031 to avoid impacts to AMI timelines.

RECOMMENDATIONS

The General Manager, Toronto Water, the General Manager, Solid Waste Management Services, and the Director, Revenue Services recommend that:

1. The Infrastructure and Environment Committee receive this report for information.

FINANCIAL IMPACT

Toronto Water's 2026-2035 Capital Budget and Plan includes funding that can accommodate the estimated cost of approximately \$17 million. Solid Waste Management Services 2027-2036 Capital Budget and Plan will be able to accommodate an additional \$3.4 million for this project.

Any incremental financial impacts to the City Divisions, including capital and operating costs implications and resources to support implementation and sustainment of a modern utility billing system, will need to be considered and addressed through future year budget processes.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

At its meeting on November 12-13, 2025, City Council adopted Item IE25.4 with the following action related to the billing system replacement:

2. City Council direct the General Manager, Toronto Water, in consultation with the General Manager, Solid Waste Management Services, the Director, Revenue Services, the Chief Financial Officer and Treasurer, and the Chief Technology Officer, to retain an industry expert to assist in:
 - a) gathering requirements, analyzing options, and preparing a recommendation for a modern rate-based budget billing system;
 - b) establishing a governance framework to ensure alignment of needs and responsibilities;
 - c) developing a detailed implementation and procurement strategy in alignment with the work underway as part of Part 1 above; and
 - d) reporting back to the Infrastructure and Environment Committee by the second quarter of 2026 the resulting recommendation and implementation plan for a modern rate-based budget billing system, as well as funds necessary to support the implementation.

A copy of the Council decision related to this item is available at:

<https://secure.toronto.ca/council/agenda-item.do?item=2025.IE25.4>

At its meeting on May 21 and 22, 2025, City Council considered Item IE21.2, entitled "Recommended Strategies to Address Prematurely Failing Water Meter Transmission

Units." City Council adopted confidential instructions to staff contained in Confidential Attachment 1 to the report (April 23, 2025) from the General Manager, Toronto Water, and the Chief Procurement Officer, as well as in Confidential Attachment 1 to Motion 1 by Councillor Amber Morley. A copy of the Council decision related to this item is available at:

<https://secure.toronto.ca/council/agenda-item.do?item=2025.IE21.2>

At its meeting on November 13 and 14, 2024, City Council, by its adoption of Item IE17.2 "Meter Transmission Units Emergency and Emergency Non-Competitive Contract with Aclara Technologies LLC to Obtain Supply of Replacement Water Meter Transmission Units", authorized, among other things, the General Manager, Toronto Water to enter into negotiations with Aclara, as the manufacturer and exclusive supplier of the MTUs, for the supply and delivery of additional MTUs, to procure additional MTUs and associated equipment from Aclara, by or before June 30, 2025 to a maximum \$3,000,000 in order to keep providing working meters and MTUs for new builds and high volume users pending Council decision on a long term strategy, and adopted the confidential instructions to staff in Confidential Attachment 1 to the report (October 7, 2024). City Council's decision can be viewed here:

<https://secure.toronto.ca/council/agenda-item.do?item=2024.IE17.2>

At its meeting on April 26, 27 and 28, 2017, City Council adopted the following: Auditor General's Report, "Audit of Water Billing and Collections - Phase II: Water Billing and Water Meter Management Controls Require Strengthening. The Auditor's Recommendation 6 was for City Council to request the Director, Revenue Services and General Manager, Toronto Water to evaluate the feasibility of updating the water billing system (WMACS) so that all property addresses could be mapped to a water meter. Toronto Water replied in the report by stating that it is not feasible to update WMACS and that WMACS should be replaced by a modern billing system to meet this requirement. A copy of this report is available at:

<https://www.toronto.ca/legdocs/mmis/2017/au/bgrd/backgroundfile-102139.pdf>

At its meeting on November 12, 2015, the Public Works and Infrastructure Committee received for information Item PW9.6 - "Water Meter Program - Final Report" whereby the General Manager of Toronto Water reported on the status of the project advising, among other things, that the project achieved substantial performance in March 2015, approximately nine months ahead of schedule, with total projected expenditures forecasted at \$168 million, or 77 per cent of the \$219 million funding limit. At the time, the financial benefits to the City were projected to be approximately \$32.8 million per year, including \$27.8 million in revenue recovery and \$5 million in operating savings. A copy of the Council decision related to this item is available at:

<https://secure.toronto.ca/council/agenda-item.do?item=2015.PW9.6>

At its meeting on December 16, 17 and 18, 2013, during consideration of report EX36.17 entitled "2014 Rate Supported Budgets - Toronto Water and 2014 Water and Wastewater Rates and Service Fees", City Council adopted amendments to Chapter 441 - Fees and Charges, Appendix D, Schedule 2, Water Services effective July 1, 2014 to include:

- A new manual water meter reading fee of \$80 per visit for consumers with water meters refusing to allow the installation of a new automatic water meter; and

- A new flat rate legacy fee of \$1,020 per year for residential flat rate consumers who refuse to allow the installation of an automatic water meter on their property.

A copy of the Council decision related to this item is available at:

<https://secure.toronto.ca/council/agenda-item.do?item=2013.EX36.17>

At its meeting on June 23 and 24, 2008, during consideration of report PW16.12 entitled "Request for Proposal (RFP) 0713-08-0001: Water Meter Replacement and Automated Meter Reading System", City Council authorized:

- The General Manager of Toronto Water and the Treasurer to negotiate and enter into an agreement, in a form satisfactory to the City Solicitor, with Neptune Technology Group (Canada) Limited in the total amount of \$191,756,663.14, net of GST including provisional items for the project; and
- An upset limit of funds required to finance the project be set at \$219 million (net of GST), including contingency, provisional item and inflationary indexing for labour and materials over the implementation period of six years.

A copy of the Council decision related to this item is available at:

<https://secure.toronto.ca/council/agenda-item.do?item=2008.PW16.12>

COMMENTS

This report summarizes the procurement approach and associated implementation strategy to replace WMACS with a modern utility billing system and portal for Toronto Water and Solid Waste Management Services. The strategy was developed with support from an industry expert and in consultation with Solid Waste Management Services, Revenue Services, Technology Services, and Policy, Planning, Finance & Administration Divisions, as directed by Council in November 2025.

1. Existing Billing System and Need for Replacement

WMACS was implemented in 1999 and continues to support water and solid waste billing today. However, it has become increasingly difficult to maintain, offers limited integration capability, relies on manual workarounds and constrains improvements to customer service and future AMI implementation. This places added strain on operations by reducing flexibility to respond to emerging issues and limiting the City's ability to deliver timely, integrated service to customers. As a result, it restricts the City's capacity to meet modern customer service expectations and deliver the seamless customer experience that residents increasingly expect. Additionally, a 2017 Auditor General's report titled "[Audit of Water Billing and Collections – Phase II](#)" recommended the evaluation of the feasibility of updating WMACS due to several limitations, which highlighted the need for a modern utility billing system.

A modern utility billing system is needed to reduce operational and technology risk, improve digital service delivery, enhance customer experience, and provide the foundation for AMI and utility billing modernization. Consistent with recommendation of an industry expert that Toronto Water retained from 2024-2025 to develop the strategy for next generation water metering ([2025.IE25.4](#)), plan to replace the utility billing system before AMI MTU installation currently planned to begin by 2032. This sequencing avoids

implementing two complex systems simultaneously and ensures the billing system can be replaced within a constrained timeframe while meeting key lifecycle dependencies.

Utility billing is specific to the City's rate-based divisions: Toronto Water and Solid Waste Management Services. Together, these rate-based divisions generate approximately \$1.8 billion in revenue annually (\$1.5 billion from water rates and \$350 million in solid waste rates in 2025). A utility billing system needs to reflect the unique needs of these divisions. Utility billing differs significantly from other types of municipal billing, such as one-time transactions for fees, permits, or services. Utility billing is characterized by recurring service/consumption-based billing cycles, complex property-based accounts and rate structures, and unique customer and operational support requirements. Therefore, a standalone billing system is needed to support rate-based divisions. Costs related to the implementation of a modern utility billing system should be incurred by rate-based divisions, with this project led by Toronto Water as the division with a larger share of rate-based revenue.

2. Implementation Strategy and Timeline

In 2026, Toronto Water retained a billing system industry expert to support planning for the billing system replacement initiative. This work included reviewing the current state, identifying business needs and capability requirements, and developing a procurement and implementation roadmap and strategy, including a cost estimate. Toronto Water established a governance framework by developing a multi-divisional steering committee and a working group to align needs, roles, and responsibilities for a modern utility billing system. Toronto Water, the working group, and the industry expert completed the following key tasks to develop an implementation strategy:

- Current state, business needs and capability requirements review; assessed current processes to identify gaps and pain points, and defined business needs and technology capabilities of a best-in-class utility billing system. This work identified the capabilities required of a modern system, including a billing portal to enhance the customer experience and help reduce call volumes and printed bills. A key requirement is maintaining critical integrations with existing corporate systems, including but not limited to the Property Tax System, to ensure continuity of revenue collection, customer account management, and operational efficiency.
- Procurement approach and implementation strategy development: Defined key steps across procurement and implementation phases for the modern utility billing system and billing portal; evaluated procurement structures and methods; and established a realistic timeline that accounts for constraints such as ongoing MTU replacements and planned AMI implementation.

As a result of this work, staff recommend a phased approach to replacing the current utility billing system. The first phase will focus on implementing a modern utility billing system, replacing core WMACS functionality and delivering selected customer-facing improvements through a modern utility billing portal. Additional optimization, automation and advanced functionality would be implemented in the future through discrete projects. This phased approach is designed to manage risk, ensure operational continuity and

organizational readiness, and allow staff time to adapt, while supporting the City's broader modernization and maintaining critical AMI timelines.

The timing of the implementation strategy also considers the ongoing MTU Replacement Program, which will address the availability of actual consumption meter readings prior to any customer accounts being migrated from WMACS to the modern utility billing system.

Key steps to enable the implementation of the modern utility billing system and portal include:

- Retaining an industry advisor who will work with staff to support the billing system replacement project, including defining requirements and developing procurement documents for both the product and the system integrator services.
- Procuring a modern utility billing system and portal ensuring the solution meets the City's current needs and enables future enhancements.
- Procuring system integration services to configure and integrate the selected modern utility billing system to replace WMACS "as-is" with inherent out-of-the-box capabilities and select process improvements, and to configure the utility billing portal.
- Implementing the utility billing system and portal to ultimately shift from the existing WMACS system to the modern billing system and portal.

3. Immediate Customer and Operational Benefits

Anticipated operational benefits from a modern utility billing system and billing portal include reduced routine call volumes, lower reliance on paper-based processes, improved reporting and stronger data accessibility. Initial implementation is intended to retain core WMACS functionality and establish a platform that can enable future improvements.

The billing portal will provide customers with secure self-service access to billing information, payment options, billing preferences, paperless billing, and reminders of when payments are due. It would also improve user experience by supporting clearer presentation of water and solid waste billing information.

Toronto Water will coordinate with the Technology Services, Communications, and Customer Experience divisions to ensure the portal adheres to corporate design and accessibility standards, provides a consistent user experience, and aligns with ongoing corporate website and customer experience initiatives.

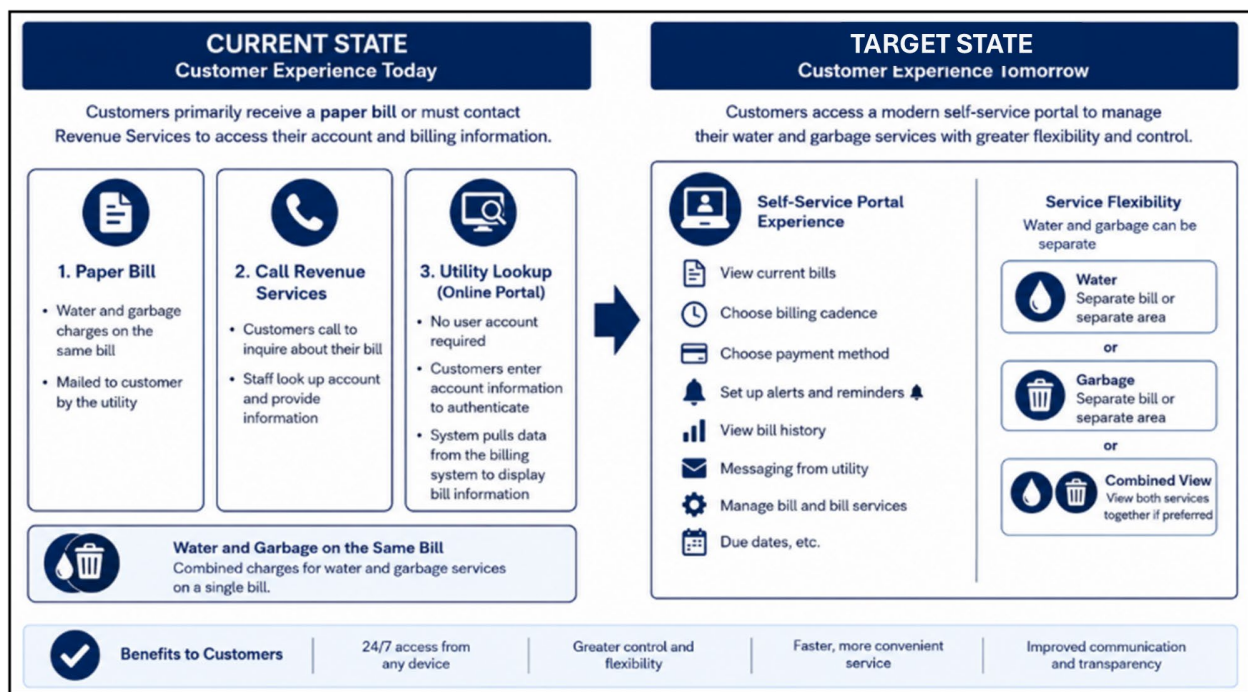


Figure 1: Current and target future state of utility billing and customer experience

Customer outreach activities will be planned at key steps of the project to understand customer expectations, guide product selection, and ensure the new billing portal design is meeting customer needs. Additionally, a marketing campaign would be developed and implemented prior to rolling out the billing portal to increase awareness and improve public adoption.

4. Future Customer and Operational Benefits

Once the modern billing system is implemented and stabilized, Toronto Water, Solid Waste Management Services, and Revenue Services will be able to leverage the system's capabilities to improve billing processes and continuously enhance customer experience.

For example, Toronto Water expects the following additional benefits will be available through the billing portal upon AMI implementation:

- Access to real-time usage data, high consumption alerts and outages. These tools improve transparency, reduce billing disputes, and enhance overall customer satisfaction.
- Collection of granular water consumption data, enhancing leak detection, demand forecasting, and supporting more responsive operational decision-making.
- Enhanced analytics enabling more effective pressure zone management, anomaly detection, and reduction of non-revenue water and outage management.
- Enablement of future capabilities, including integration across water, wastewater, energy and conservation, and near real-time outage map and service restoration notification.

5. Procurement, Governance and Resources

Toronto Water and Solid Waste Management staff, in consultation with Purchasing & Materials Management Division, recommend that the city undertake separate procurements for the software solution and the system integration services using a Negotiated Request for Proposal process. This approach allows for independent selection of a best-fit solution and a best-fit implementer, prioritizing quality at the expense of longer procurement timelines, while negotiations allow for achieving greater flexibility and value to the City.

Implementation will require significant involvement from staff with knowledge of current billing processes and systems. Toronto Water will lead the project with support from a billing system industry advisor and participation from Solid Waste Management Services, Revenue Services, and Technology Services divisions, along with other relevant stakeholders as applicable.

6. Cost Estimate

The total cost to design and implement the modern utility billing system and billing portal is estimated to be between \$13 million and \$21 million, including limited internal staffing costs.

The estimate includes advisory services, billing system and portal software, system integration services and six months of hyper-care following go live. Annual ongoing product subscription fees for the billing system and portal would be determined through the competitive bid process.

7. Next Steps

Once this report has been considered by the Infrastructure and Environment Committee, Toronto Water, in consultation with Revenue Services, Solid Waste Management Services, Financial Planning and Technology Services, will retain an industry advisor to support the modern utility billing system procurement and implementation process; procure a modern utility billing system, billing portal, and a system integrator; and focus billing system implementation scope on replacement of the WMACS system “as-is” with a commercial off-the-shelf modern utility billing system, with enhancements to customer experience and limited improvements to the back-end systems to align with AMI initiative.

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