

20
20 | City of
Cambridge
BUDGET

INVESTING IN OUR CITY INVESTED IN OUR CITIZENS

2020 Approved Budget and Business Plan - Water Utility
Budget Summary



cambridge.ca/budget

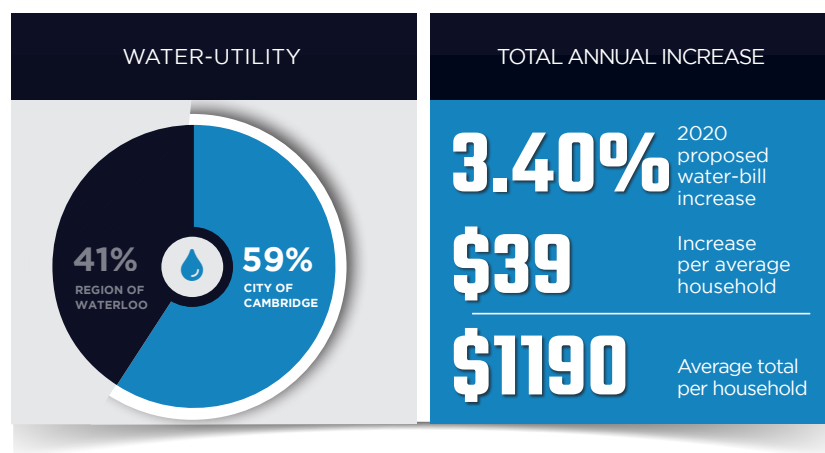
Water Utility Budget

Summary

The water utility budget determines the city's water and wastewater rates, paid on Cambridge water bills. The budget covers the daily costs of running the water and wastewater utilities, including the purchase of clean water and wastewater treatment from the Region of Waterloo.

The 2020 water utility budget includes gross expenditures of \$70.4 million. The budget is balanced as required through provincial legislation, so that revenues equal expenses.

The average annual household water utility bill for 2020, including both water and sewer, is \$1,190 based on an average consumption of 204 cubic meters. This represents a proposed annual increase of \$39 or 3.40 per cent over 2019. Of this, \$14 or 1.23 per cent is for the treatment of water and sewer by the Region of Waterloo, the cost of which is passed down to the City's water bill. The remaining \$25 or 2.17 per cent of the increase is the result of continued investment in the city's water and sewer networks.



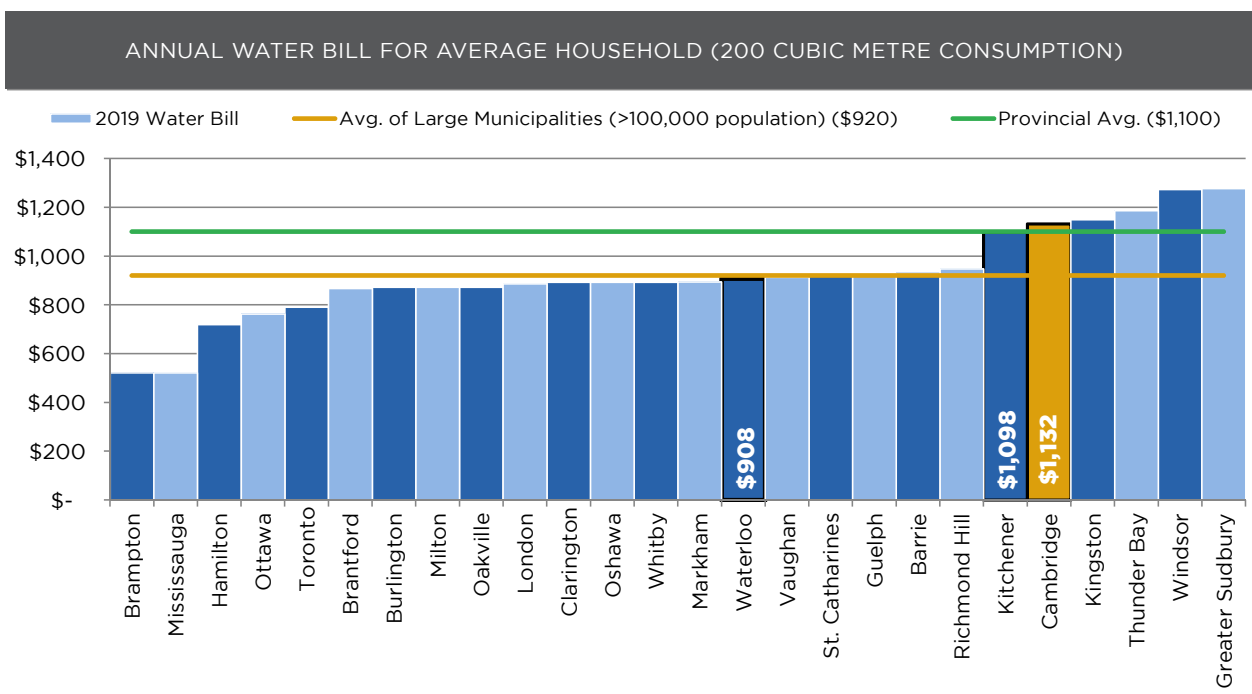
The 2020 water and wastewater rate increases of 3.40 per cent is below the forecasted revenue requirements increase of 3.90 per cent as predicted in the water and wastewater long-range financial plan approved in 2019 in accordance with Ontario Regulation 453/07.

Further details of the 2020 Water Utility Budget can be found in the Water Utility Budget Details section on pages 160 to 165.

Water Utility Budget

Comparison to Other Municipalities

The estimated annual water bill for Cambridge residents is slightly above the provincial average as calculated by BMA Management Consulting Inc. in their 2019 Municipal Study.

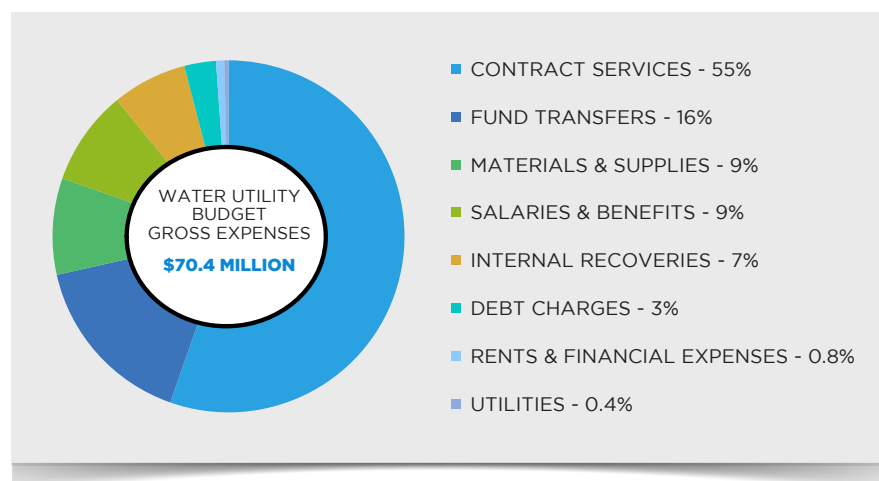


Water Utility Budget

CITY	2019 EST. AVG. HOUSEHOLD INCOME	2019 AVERAGE RESIDENTIAL WATER BILL (200m ³)	2019 WATER BILL AS % OF HOUSEHOLD INCOME
Cambridge	\$100,582	\$1,132	1.1%
Waterloo	\$117,592	\$908	0.8%
Kitchener	\$93,523	\$1,098	1.2%
Average of all Ontario Municipalities	\$105,849	\$1,100	1.0%
Median of all Ontario Municipalities	\$99,645	\$1,061	1.1%

The ability to pay, as estimated using average household income, may vary for each community. This is an important check in determining the affordability of utility bills. BMA Management Consulting Inc. also computes this affordability check in their 2019 Municipal Study. For the average residential household in Cambridge, the 2019 water bill represented 1.1 per cent of estimated income, which is in line with the provincial average.

Expenses



Major components of the water utility budget can be summarized by the specified expense categories.



Water Utility Budget

CONTRACT SERVICES

Contract services represent 55 per cent of the water utility gross expenses. The largest cost in the water utility budget is the purchase of clean water and wastewater treatment from the Region of Waterloo. The Region's rate for water treatment has increased by 1.9 per cent, and their rate for wastewater treatment has increased by 3.9 per cent. Of the average annual 2020 household water bill totaling \$1,190 (based on estimated consumption of 204 cubic meters), 41 per cent directly relates to the purchase of these services from the Region.

Other contract services include meter reading and professional services in the sewer lateral maintenance program.

FUND TRANSFERS

A portion of water utility bills is used to support major rehabilitation and replacement of water and wastewater infrastructure, represented by the fund transfers expense category and 16 per cent of gross expenses. These transfers are based on the water and wastewater long-range financial plan, with the principle of full sustainability in accordance with O. Reg. 453/07. The transfers are used for the water and wastewater capital investment plan in the City's capital budget.

Water Utility Budget

INTERNAL RECOVERIES

Internal recoveries represent seven per cent of water utility expenses. These expenses are the corporate overhead recovery from the tax-supported operating budget. Recovery amounts are based on direct costs and funding percentages established as part of the long-range water and wastewater financial plan. A portion of certain divisions directly support water utilities, and this portion is recovered from the water bills through these internal recoveries. These programs include:

- ➔ Asset Management & Project Management
- ➔ Financial Services
- ➔ Engineering Services
- ➔ Public Works
- ➔ Planning
- ➔ Building Services
- ➔ Forestry
- ➔ General corporate overhead for administration

DEBT CHARGES

The City's debt policy balances several considerations when determining whether projects should be funded from a pay-as-you-go approach versus debt financing. These considerations include:

- ➔ The opportunity cost of using cash that could be deployed elsewhere
- ➔ The need to manage and protect asset replacement funds over time
- ➔ The cost of capital
- ➔ Whether or not benefits will accrue to future taxpayers, which favours spreading out the repayment terms through debt financing
- ➔ The useful life of the investment

As per this debt policy, rate-supported debt charges will be limited to 15 per cent of the City's rate-supported revenues. The policy also requires that in the year that a debt-financed capital project is approved, 50 per cent of the annual debt repayment amounts are to be included in the budget with the full impact being included in the following year.

Water Utility Budget

The water utility debt payments for 2020 are for the following approved capital projects:

PROJECT YEAR	PROJECT DESCRIPTION	DEBT PAYMENTS (\$)
2011	Thin Wall Cast Iron Watermain Rehab Backlog	486,500
2015	Hespeler Streetscape (Queen-Adam-Guelph-Tannery)	31,800
2015	Valley Drive & Maple Street	31,800
2015	Hopewell (Seven-Fairview) Severn Ave (Hopewell-Grand Valley)	25,800
2015	Lowell & McNaughton	20,200
2015	Bergey (Adam-Edward)	16,600
2015	Glen Morris & Selkirk	26,200
2015	Davidson Street & McKenzie	30,200
2015	Pollock Ave (Lincoln Ave-Lowell St N)	17,300
2015	Walker & Flynn Ave	20,400
2015	Elizabeth-Gerrard-Avondale-Scott Rd	95,200
2017	Samuelson St Watermain Renewal	27,900
2017	Walter St Watermain Renewal	51,300
2018	Advanced Metering Infrastructure	1,158,000
	TOTAL 2020 DEBT PAYMENTS	\$2,039,200

Water Utility Budget

In February of 2018, Council approved a smart water meter project to install or retrofit smart meters in homes throughout the city. The new smart meters will utilize an advanced metering infrastructure (AMI) system to provide remote meter reading, data analysis and alerts for possible leak or flow problems. This real-time data will help ensure bill accuracy, and allow City staff and residents the ability to detect potential water leak issues in a timely manner to manage unnecessary water costs. Debt will be used to pay for the upfront project costs, and debt repayments will be covered by anticipated savings from reduced water loss and wastewater inflow and infiltration. As such, there is no impact from the project on the water utility bill. In accordance with policy, half the debt costs or \$0.6 million were included in the 2019 budget and the remaining half in 2020.

OTHER COSTS

Other costs in the water utility operating budget include:

- ➔ Salaries and benefits (nine per cent of water utility expenses)
- ➔ Materials and supplies (nine per cent of water utility expenses)
- ➔ Rents and financial expenses (0.8 per cent of water utility expenses)
- ➔ Utilities (0.4 per cent of water utility expenses)

These costs are primarily to support the ongoing maintenance and repairs of the city's water and wastewater infrastructure.

Water Utility Budget

Revenues

The water utility budget is funded through the following sources:

- ➔ User fees
- ➔ Penalties and interest
- ➔ Transfers from reserve funds

User fees represent 98.5 per cent of the funding, paid through the water utility bill and other fees charged on a cost recovery basis for services. Interest is charged on overdue payments, making up 0.2 per cent of funding.

Transfers from reserve funds represent one per cent of the total funding. The budget includes a transfer of \$0.3 million from the water capital reserve fund to cover the cost of the meter maintenance program. A portion of the water bill is used towards this reserve fund for sustainable planning on the City's water meter assets. The budget also includes a temporary draw of \$0.6 million from the water and wastewater rate stabilization reserve funds to bridge the gap associated with the timing of the advanced meter infrastructure project: operating impacts from this project are incurred in the early years of the project while the savings in water loss and wastewater inflow and infiltration will be achieved as the smart meters are actually installed and retrofitted.

Water Utility Budget

Staff Complement Changes

The 2020 water utility operating budget includes a total staffing complement of 97.34 full-time equivalents (FTEs). The table below highlights the changes in FTEs from 2019.

DEPARTMENT	2019 BUDGET RESTATED	2020 REALLOCATION OF STAFF	2020 GROWTH & CAPITAL IMPACTS	2020 TOTAL FTE
Water	55.46	(0.10)	1.00	56.36
Sewer	40.57	0.41		40.98
Total FTE	96.03	0.31	1.00	97.34

The 2020 water utility budget includes a net increase of 1.31 FTEs. These changes include:

- ✚ Certain positions in the tax-supported operating budget are funded in part through water and sewer rates, as they directly support both tax and water utility operations. The portion recovered through the rates is periodically reviewed to ensure appropriate cost distribution between the tax and water/sewer funds. These recoverable rates were adjusted for certain positions through the 2020 budget. This results in no change to FTEs overall, however does reflect a redistribution of FTEs between the Operating and the Water Utility budgets.
- ✚ The advanced metering infrastructure (AMI) project approved in 2018 included a capital impact of an additional FTE in Public Works for 2020. This FTE will support the new equipment through issue investigation and resolution.

Water Utility Budget

Water Utility Budget Forecast

In accordance with provincial legislation, the City completed an update to its water and wastewater long-range financial plan in 2019. This update reviewed the sustainability of the city's water and wastewater infrastructure, and set the target for annual revenue increases of 3.9 percent over the next 10 years. Since the completion of the long-range financial plan, the City has identified efficiencies through continuous improvement during the budget review, as well as lower than forecasted Regional water and sewer treatment rates, and are projecting water utility increases that are below the targets set in the long-range financial plan.

The 2020 and projected water utility rate increases for 2021, 2022, and 2023 are shown on the following graph as a dotted line.

