

Infrastructure Renewal Strategy



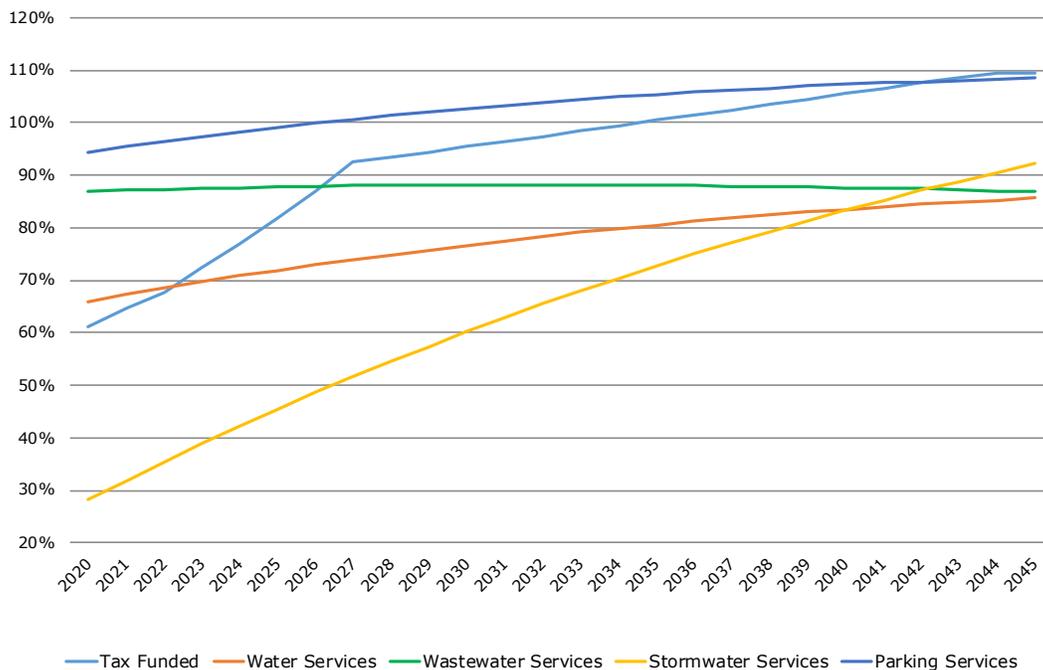
The City’s Infrastructure Renewal Strategy has one main goal, ensuring funding levels are sufficient to meet the maintenance and replacement needs of all City infrastructure.

The City owns an inventory of over \$4.39 billion in assets including roads, bridges, facilities, pipes, structures, vehicles, and equipment. Currently, the City has a gap between the annual funding needed versus the amount available each year for infrastructure renewal.

Capital Infrastructure Renewal Strategy

The target capital sustainable funding levels are identified in the [Asset Management Plan](#) which considers the replacement cost of all assets based on age and condition. The City’s asset management practices have been evolving since 2016, now achieving a “core” rating. The sustainable funding targets will continue to be refined as the City’s practices mature, and they will grow as Council adds new infrastructure assets to support a growing population.

Chart 1: Infrastructure Sustainability



The City has been focused on a long-term approach to reaching capital sustainability in each of the lines of business identified in Figure 1 chart. The City looks at the water, wastewater, stormwater and parking services sustainability levels individually because they are user-rate supported. The tax supported businesses are then grouped in the tax category and include infrastructure like roads, bridges, community centres, transit fleet and facilities, City Hall and emergency service facilities and vehicles. Staff recommends



annual increases in the capital funding for infrastructure renewal based upon Council-approved long-term plans to reach sustainable funding.

Based on the recent update to the Corporate Asset Management Plan there have been some changes in the sustainable funding targets for the user-rate supported services, while the tax supported target remain stable. The City is still expected to reach sustainable funding by 2037, however the targets for stormwater and water increased significantly while wastewater and parking both decreased. Based on these revised targets, staff will work during 2021 to develop appropriate strategies and present them to Council prior to the 2022 budget discussions.

Funding Source	2021 Capital Reserve Fund Transfer Increase (Decrease)	2021 Total Transfer to Capital Reserve Funds
Tax	\$3,025,930	\$30,620,000
Parking	(\$94,908)	\$2,836,032
Stormwater	\$799,940	\$6,346,000
Funding Source	2021 Capital Reserve Fund Transfer Increase (Decrease)	2021 Total Transfer to Capital Reserve Funds
Wastewater	\$301,000	\$14,551,000
Water	\$500,000	\$15,062,160
Total	\$4,531,962	\$69,415,192

Great progress has been made since 2015 when the need for additional capital funding was first addressed. The current tax supported infrastructure renewal strategy was introduced in 2017 to move the City towards sustainable funding over a planned 10-year implementation phase. Through the first four years of the strategy, the increase in annual tax funding directed to infrastructure renewal is \$7.5 million with a cumulative amount of \$19.1 million. Through continuing to review and analyze the City asset data, the estimated backlog had decreased. However, this does not mean the City is funding capital at a sustainable level. The asset management program indicates that the City’s Infrastructure Renewal Funding Strategy is successful and that this should continue to be a priority focus for financial investment.

Included in the tax supported sustainable funding transfers are the on-going federal and provincial gas tax funding grants, as well as investment income and dividends from the city’s wholly-owned entities that all assist in reducing the property tax impact of this strategy.

While increasing funding annually is one strategy to meeting the sustainable funding targets, selling or disposing of aged assets that are no longer required can also help with reaching this goal. The City is actively looking at facilities and other assets across the City that are considered surplus or not needed in order to deliver services. Reducing the inventory of aged assets reduces the long-term sustainable target and therefore the



amount of capital funding that will be required over time. In October 2020, the City is removing a [sewage pumping station](#) for this reason, and is also in the process of demolishing the old SUBBOR facility on Dunlop Drive. A Council report is planned in December 2020 that will further discuss the City-owned facility on Delhi Street as well as other sites that would contribute to reducing the tax supported sustainability target.

Operating Infrastructure Renewal Strategy

The City's strategy since 2017 has primarily been focused on capital funding sustainability but through the 2021 budget development, we are developing a more comprehensive strategy that looks beyond just capital. Sustainable funding for asset management includes operating repair and maintenance budgets as well as the people resources needed for both operating and capital renewal programs.

For this reason, there are three items in the 2021–2024 operating budget that Council should be aware of:

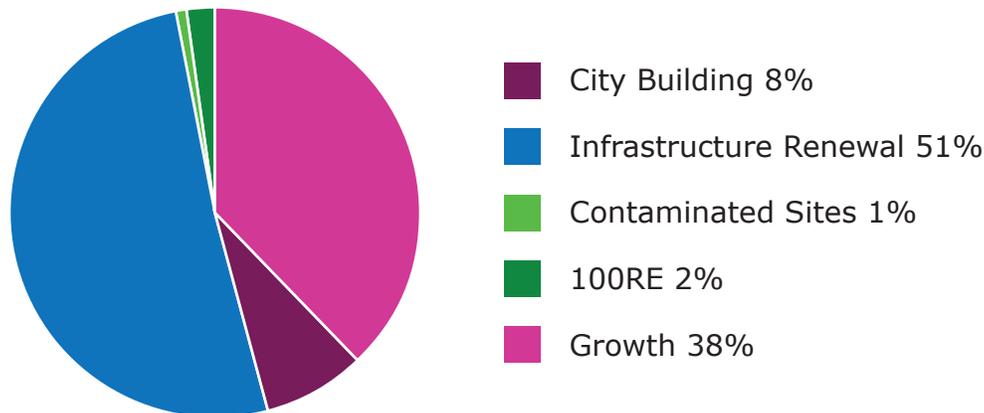
- Tax supported operating maintenance funding is not at the required levels and there are forecasted increases in 2022 to 2024 that addresses this concern. As fleet and equipment are aged longer, because of a lack of adequate capital funding, it is costing more to maintain these assets annually. There was an adjustment of \$414,900 made in 2021 given base budget availability from lower fuel costs.
- Staff has been analyzing the reason for a growing uncommitted capital budget that has been identified in the tri-annual capital variance process. Corporately, there are 12 temporary contract project management staff delivering the projects identified in the capital plan. People resources are a critical part of maintenance and renewal plans and there are inefficiencies, business continuity concerns and significant project delays because of the current resourcing model in place. Staff is planning to bring a report forward to Council in 2021 that further explores and recommends solutions for this growing concern.
- Council approved a technology project as part of the 2020 budget for the implementation of a new Corporate Maintenance Management System which brings together the capital and operating maintenance costs on each asset enabling staff to optimize the most cost effective solutions across the City for asset management. This is a multi-year implementation given the pervasive change this will have on our business operations. This again supports the need for more comprehensive strategies that link the operating and capital infrastructure renewal funding requirements.

2021–2030 Capital Budget and Forecast Infrastructure Renewal Projects

The Capital Budget and Forecast is primarily focused on infrastructure renewal projects given the significant and growing backlog identified in the Asset Management Plan update. Approximately \$990.3 million, or 51 per cent of capital spending is identified within the 10 years that address aging infrastructure.



Chart 2 : 2021–2030 Capital Plan by Expenditure Type



Notable projects include:

- Central Library replacement
- Operations Hub – replacement of 170 Watson Road, 45 and 50 Municipal Street, and Riverside Park facilities
- Road reconstruction – Total road reconstructions including replacement wastewater collection system, water supply system and reconstruction of road surfaces: York Road – Stevenson to Victoria; Paisley Rd. Feedermain Phase 3 - Ryde Road to just before Fischer Drive; PN0847 Manitoba Street - Ontario to Huron Street, and Metcalfe – Eramosa to Terry
- Bridge renewal – bridge replacement as part of the full reconstruction of Speedvale Ave – Woolwich to Metcalfe. Structure replacement on Imperial Road North, and repairs on Edinburgh Road structure as recommended in the bi-annual Ontario Structure Inspection Manual (OSIM) inspections report
- Water transmission - Implementation of a North West Industrial Area Cast Iron Watermain Replacement Program to address watermain material types subject to failure and associated service disruptions to area industrial customers – including the replacement of cast-iron watermain on Speedvale Ave W from Edinburgh Rd to Silvercreek Parkway N in 2021
- Wastewater Services – Digester structural repairs and gas proofing to maximize life expectancy
- Stormwater Services – Stormwater Management (SWM) facility rehabilitation (ponds)

What are we using Federal Gas Tax money for?

The City includes Federal Gas Tax funding as part of the tax supported Infrastructure Renewal Strategy. As part of the 2019–2020 Federal budget there was a one-time doubling of the Federal Gas Tax allocation to all municipalities which has provided an additional \$7.6 million of funding that can be used for any project normally eligible as part of the program. The City also received an allocation of \$8 million in 2020 and has planned to receive similar amounts through the 10 year forecast. As part of the proposed capital



budget and forecast, this funding is allocated to a number of projects that have been identified as immediate priorities by condition assessments and studies:

- Total road reconstructions including replacement wastewater collection system, water supply system and road surfaces: Paisley Rd. Feedermain Phase 3—Ryde Road to just before Fischer Drive; Metcalfe—Eramosa to Terry, and full reconstruction including bridge replacement on Speedvale Ave—Woolwich to Metcalfe.
- Playground replacement across the City to ensure that safe, inclusive, and accessible structures are available for the community to gather and enjoy the outdoors.
- Replacements and rebuilds of intersection signal equipment along with the installation of pedestrian crossovers and other road safety initiatives such as signage, pavement markings, speed radar boards and other traffic calming strategies to keep pedestrians and motorists safe while accessing the City's roadways.

What if Council doesn't approve the capital transfers as planned for in the 2021 Budget?

If Council doesn't approve the transfers as recommended by staff in 2021, there is a compounding effect through the ten-year capital plan and beyond. In each business, it will have a different effect and for demonstration purposes, staff has used the tax supported transfer as an example.

Impact of reducing the tax supported capital transfer by 10 per cent in 2021 from \$30.62 million to \$27.56 million.

- Loss of \$3.06 million of funding in 2021; Loss of \$29.56 million from 2022 to 2030
- Extension of year sustainability would be reached from 2037 to 2042; increase in projected tax supported infrastructure backlog in 2042 by \$77.2 million
- The primary impact will be a lowered service level across all City assets and services, such as IT services that support citizen access to services, equipment used to monitor and maintain roads, water and wastewater systems, reduced repaving activities which will further exacerbate the current poor [Citizen Satisfaction Results](#) for road condition in the City.
- A long term risk of this action would be the increased potential of asset failure requiring the closure of roads, bridges, or facilities because of the health and safety impacts on staff and the community. This is not a new concern; in the recent past, the City has had to demolish two city structures (salt storage dome and packer storage building at 45 Municipal Street), and close and replace bridges and structures (Niska bridge and 100 steps structure). [Emergency repair work](#) will also increase over-time if infrastructure renewal work cannot be completed on a timely basis. If funding and people resources to execute the growing capital need are not addressed, these types of occurrences will increase.