

Roads

2022-2025 Business Plan & 2022 Budget

Foreword

Our Vision for the Future

Mississauga will inspire the world as a dynamic and beautiful global city for creativity and innovation, with vibrant, safe and connected communities; where we celebrate the rich diversity of our cultures, historic villages, Lake Ontario and the Credit River Valley. A place where people choose to be.

Mississauga City Council approved Our Future Mississauga; a Strategic Plan to achieve this vision over a 40-year timeframe. The City engaged over 100,000 people to develop this Vision Statement. To achieve this vision the City has identified five Strategic Pillars for Change: move, belong, connect, prosper, and green. Each year the City proposes various initiatives that are aligned with the Strategic Pillars and are intended to bring us closer to fulfilling our vision for the future. The City delivers over 300 services which are consolidated into 16 Service Areas (including the Stormwater Program) that are outlined in this Plan. The 2022-2025 Business Plan & 2022 Budget document details how and where the City plans to allocate resources to deliver programs and services.

The City is committed to providing programs and services cost effectively. In this Plan we have outlined measures that will help assess the quality, efficiency and customer satisfaction that our services achieve. The results help inform decisions on resource allocations and direct program offerings, and improve service delivery to ensure our vision is efficiently realized.

The ongoing COVID-19 global pandemic is a significant factor impacting the 2022-2025 Business Plan & 2022 Budget. Service levels and service delivery continue to be affected.



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Executive Summary of Roads

Mission: To plan, develop, construct and maintain a multi-modal transportation system which efficiently and safely moves people and goods, respects the environment, supports the development of Mississauga as a 21st century city and serves the municipality's social, economic and physical needs.

Services we provide:

- Planning, design, construction, operation and maintenance of roadways, bridges, the cycling network, sidewalks, noise walls and related infrastructure
- Management of the City's traffic signals, streetlighting, municipal parking, and fleet of vehicles (with the exception of transit and fire vehicles)

With a continued focus on urban mobility, asset management, service delivery, and our people and culture, the Roads Service Area is poised to continue to provide responsible road-related infrastructure services.

Interesting facts about this service:

- Transportation infrastructure is the largest asset owned and operated by the City of Mississauga with a 2020 replacement value of \$5 billion, and is made up of bridges, culverts, roads, noise walls, the active transportation network, public parking lots, and the streetlight and traffic signal systems
- The City has 5,680 lane kilometres of road network
- The City's cycling network includes 601 kilometres of multiuse trails, park paths, bicycle lanes and signed bike routes
- The cycling network laid out in the 2018 Cycling Master Plan update will result in 897 kilometres of infrastructure to be built over 27 years

Highlights of the Business Plan include:

- Progressing toward Vision Zero by making capital and operating investments to implement the Transportation
 Master Plan as well as developing a Vision Zero Action Plan
- Continuing Transit Project Assessment Processes and Environmental Assessments for key transit projects – Dundas Bus Rapid Transit and Lakeshore Higher Order Transit
- Investing in major roads such as the Goreway Drive Grade Separation and Active Transportation facilities
- Continuing the Integrated Roads Infrastructure Program to improve the planning and delivery of projects on the City's arterial and collector roads
- Maintaining service levels by making operating investments, and improving customer service through Lean initiatives
- Developing a robust, comprehensive and integrated asset management plan for all road-related infrastructure including addressing the ongoing pressures on our Roadway Rehabilitation Program
- Continuing investment in the streetlighting program

Net Investment (\$000s)	2022	2023	2024	2025
Operating	69,007	70,541	72,208	73,521
Capital	81,762	82,742	100,534	78,606
Full Time Equivalents	527.7	500.7	510.2	512.2

Core Services

Vision, Mission, Goals of Service and Service Delivery Model

Vision

To deliver a world-class transportation network while upholding community standards and enhancing quality of life.

Mission

To plan, develop, construct and maintain a multi-modal transportation system which efficiently and safely moves people and goods, respects the environment, supports the development of Mississauga as a 21st century city and serves the municipality's social, economic and physical needs.

Goals of Service

- Maintain our infrastructure in a state of good repair, with focus on a safe and efficient urban mobility system
- Plan, design, and construct an adaptable transportation network for all users and modes of transport
- **Deliver** quality and timely departmental services
- Apply progressive asset management practices to achieve cost containment and value for money
- Recognize and develop employees and create an empowered employee culture to meet current and future challenges



Service Levels and Trends

The management of infrastructure assets is accomplished through a number of operational activities; the existing service levels for these activities are summarized below.

Infrastructure Programming: Develop an appropriate 10-year capital budget in accordance with lifecycle asset management practices and meet budget preparation and construction timelines.

Long-range Planning and Policy Development: Develop and implement appropriate plans and strategies to guide decision-making.

Transportation Master Plan: The City's first Transportation Master Plan (TMP) was approved in 2019 and identifies 91 action items that will allow Mississauga to achieve its vision for mobility for 2041. There are 57 action items that are to be initiated in the first five years, 10 of which have been completed.

Road Safety: The TMP places a great emphasis on road safety and has identified 32 action items that will improve safe conditions for all road users and support Vision Zero, 24 of which are to be initiated in the first five years. A Vision Zero Action Plan is also under development and will be completed by year end.

Traffic Control Signals: Repair or replace all traffic control signals within times specified in the Minimum Maintenance Standards.

Pavement Marking Maintenance: Re-apply all white pavement lines on streets twice per year and all yellow pavement lines on streets once per year.

Roadway Sign Maintenance: Replace all stop signs that are broken, damaged, illegible, improperly oriented or missing within three hours of being notified.

Active Transportation: Plan annual sidewalk and cycling network programs in accordance with the Cycling Master Plan

and transit accessibility priorities. Develop and implement transportation demand management initiatives to encourage and foster sustainable transportation.

Winter Maintenance: Clear all major arterial and collector roads, priority sidewalks and bus stops within 12-24 hours, and residential roads within 24-36 hours, depending on accumulation.

Customer Service: Respond to all emergency-related service requests as soon as practical, and investigate all non-emergency service requests within three days and respond within 10 days.

Bridges and Culverts: Inspect all bridges and culverts every two years and maintain in a safe condition.

Average Road Network Condition: Assess roadway pavement conditions every four to five years in accordance with provincial and industry standards, and maintain in a safe condition.

Traffic Management: Manage traffic operations in accordance with provincial regulations and design standards.

Streetlighting: Maintain and operate the streetlight network in accordance with established service response times. Respond to malfunctioning lamps within the range of 24 hours to 10 business days based on the location and quantity.

Capital Construction: Adhere to all provincial standards and codes for construction and safety.

Municipal Parking: As Mississauga grows through intensification, the Parking Master Plan and Implementation Strategy provides the City with the framework for developing, maintaining, and managing municipal parking infrastructure.

Fleet Services: Ensure that vehicles and equipment are ready when required. Maintain an excellent compliance rating with our Ministry of Transportation fleet inspections and Commercial Vehicle Operator's Registration. Green the fleet.

Trends

Mississauga continues to mature as a city. Aging infrastructure, public demand for increased road safety and the need to balance service levels with affordability pose significant pressures and challenges for this Service Area.

The Roads Service Area, in partnership with Corporate Asset Management, continues to work on the Asset Management Plans for the City's infrastructure to meet the requirements of Ontario Regulation 588/17, Asset Management Planning for Municipal Infrastructure. The Asset Inventory and Management Program will accelerate the City's current plans to prepare inventories, condition assessments, replacement values, and management plans for all City-owned assets within municipal roads and other rights-of-way. It will also streamline and improve the way the City uses technology to manage and access asset inventory information, improve service delivery processes, and improve decision-making for maintenance and renewal investments.

The City approved a comprehensive Transportation Master Plan in 2019 to address all aspects of transportation in Mississauga over the next 25 years, and its implementation is underway. The TMP developed a consolidated vision for the future of mobility in Mississauga and established an overarching policy framework and action plan to guide investment in transportation infrastructure and services. As more people travel to, from, around and through Mississauga without driving their own cars, the City looks for new ways to enhance our existing infrastructure, so that past investments continue to serve present needs well into the future.

The Roads Service Area has initiated the Integrated Roads Infrastructure Program to improve the planning and delivery of projects on the City's arterial and collector roads. The successful implementation of the program will improve co-ordination of City road projects, reduce construction costs and construction

nuisance for local residents through the bundling of various road improvement projects.

Road Safety remains a high priority as demonstrated by City Council's decision to adopt Vision Zero, a framework that focuses on preventing and ultimately eliminating all pedestrian, cyclist and motorist fatalities and injuries on city streets. In a Vision Zero city, safety is prioritized over factors that traditionally influence transportation decision-making, such as cost, vehicle speed and delay, and vehicular level of service. The Neighbourhood Area Speed Limit Project is lowering speed limits city wide in an effort to reduce vehicle operating speeds and create safer neighbourhood roadways. In order to achieve operating speeds appropriate for lower speed limits, a robust Neighbourhood Speed Management Program is necessary. The implementation of the Automated Speed Enforcement (ASE) project (BR #8556), Automated School Bus Cameras (BR #9073), and pursuit of future technology in the form of red light cameras are integral components this program.





Street sign notice and camera for ASE

On May 19, 2021, Council approved increasing the number of ASE cameras to 22. This important technology tool supplements existing police enforcement in order to reduce vehicle speeds, delivering on the actions in the TMP and advancing Vision Zero. The City is taking a thoughtful and planned approach to implementing ASE in Mississauga to ensure it is aligned with new

provincial regulations and effective for years to come. In July 2021, the first two ASE cameras started actively enforcing the speed limit and the remaining 20 cameras will be installed before the end of the year.

The ongoing development of a proactive Advanced Transportation Management System (ATMS) will allow the City to actively monitor travel conditions, influence the operation of traffic signals, disseminate information and interact with transportation modes and agencies, with an overall view to reducing congestion and its effects on the road network. Implementation of the ATMS continues with a demonstration pilot, begun in 2018, of Intelligent Transportation System (ITS) initiatives along the Dundas Street corridor between Ninth Line and Mississauga Road. The pilot will enable adaptive/responsive traffic controls to automatically adjust traffic signal timing and will provide motorists with prevailing travel times in the fall of 2021.



ATMS installation along Dundas Street

A key component of mobility within Mississauga now and in the future is ensuring that appropriate investments are made in higher order transit initiatives. As a result, the City is carrying out Transit Project Assessment Processes (TPAPs) and Environmental Assessments (EAs) for key transit projects — Dundas Bus Rapid Transit (BRT) and Lakeshore Higher Order Transit (HOT) Corridor. Funding for these projects can be found in the MiWay Service Area; however, the projects themselves

will be delivered by staff within the Roads Service Area to ensure full integration with all of the City's transit and road network initiatives. In January 2021, it was announced that the City will receive Investing in Canada Infrastructure Program (ICIP) funding for the Lakeshore HOT Corridor. A similar funding announcement is still pending for the Dundas BRT project.

There is a growing need for the City to provide municipal parking to meet increasing demand and for city-building projects. To assist with this, the City completed its first Parking Master Plan and Implementation Strategy (PMPIS), which was approved by Council in 2019. The plan outlines how local parking will evolve as the City continues to grow and transform, and provides direction on the purpose and intent of parking policy and operations. Implementation of the PMPIS will improve the state of parking in the City by right-sizing requirements and modernizing parking permits and permissions that will support the City's Strategic Plan. The PMPIS will be implemented in three phases and Phase I of the five-year implementation plan is currently underway.

As a result of increasing public demand for accessible infrastructure, coupled with legislative requirements, Mississauga is becoming a more accessible city. There is pressure on the Roads Service Area to design, operate and maintain accessible road-related infrastructure. Meeting and exceeding these accessibility standards to provide mobility options for everyone is an evolving practice for this Service Area.

Overarching themes for the Roads Service Area continue to be public safety and the responsible delivery and maintenance of infrastructure in a state of good repair. Accessibility is also affecting maintenance, particularly winter maintenance: the Service Area is making bus stops and priority sidewalks more accessible by conducting winter maintenance sooner. In addition, the new eight-year winter maintenance contract will begin in the fall of 2021. The new contract provides for more effective and efficient winter maintenance and enhanced salt management practices.

Performance Measures and Results

The City of Mississauga is committed to delivering services economically and efficiently. The City's performance measures are used to help assess how well we are doing at achieving our goals and where we need to improve operations. The results also inform decision-making and strengthen accountability.

Balanced Scorecard

A Balanced Scorecard traditionally assembles organizational performance measures from four areas: customer, financial, workforce, and business process. Measures from each area tell an important part of the performance story. Changes in one area can result in pressures in another, as they do within an ecosystem; taken together, measures from all four areas present a balanced overview of how things are going.

- Customer measures describe how well the service is provided (quality; outcome attainment; and user and citizen satisfaction measures on dimensions such as quality, value, price, product, and service), and how much service the organization provides (volume or capacity measures)
- Financial measures describe the organization's financial performance. Companies often use measures such as profit, revenue to cost, and cash flow. Corporately, City examples include investment performance and interest costs. Service Area measures could include ratios of revenue to cost, costs per unit of service delivered (cost efficiency), per capita costs
- Workforce (formerly 'Employee') measures describe
 workforce factors that can contribute to the effective delivery
 of service. These could include rates of innovation,
 employee satisfaction, qualifications/training, and workforce
 stability measures such as the rate of succession plan
 participation

 Business Process measures describe the efficiency and/or effectiveness of a given process. They help to identify any gaps, delays, bottlenecks, shortages, or waste. Time is often a dimension of these measures; e.g., time to respond on scene to an emergency. Resource use and rate of targeted outcome attainment are also often dimensions of business process measures

As an organization with a service (vs. profit) mandate, the City gives customer measures pre-eminence on its Balanced Scorecards. Doing this does not diminish the importance of financial, workforce and efficiency measures. Those measures help the City focus on achieving an outcome that is as important to taxpayers as any other, which is to get the most value possible out of their money.

Below are descriptions of the customer, financial, workforce, and business process performance measures tracked in this Service Area's Balanced Scorecard. The Balanced Scorecard table that follows shows trends since 2018 and expected outcomes to 2025.

Customer Measures

Citizen satisfaction with road services indicates how satisfied residents are with road safety, streetlighting, snow removal, and the pedestrian-friendliness and cyclist-friendliness of roads.

Citizen satisfaction with road safety indicates how satisfied residents are with their perceived level of safety while using the roads for various modes of transportation and leisure.

Citizen satisfaction measures are taken from the Mississauga Citizen Satisfaction Survey, typically completed every two years (the most recent survey data available is from 2019).

Financial Measures

Average road operating cost per lane km describes operating costs on average per lane kilometre of roadway.

Average road and bridge/culvert maintenance cost per m² of surface area is a measure of the City's ability to manage cost pressures associated with aging infrastructure, while providing consistent services levels.

Average winter maintenance operating cost per lane km is a measure of the City's ability to balance winter maintenance operating costs with defined service levels.

Annual gross parking revenue is a measure that describes the revenue the City realizes from fees charged for parking. Any surplus parking revenues are transferred to the parking reserves and funds from the reserves are used for parking improvements, initiatives and capital projects.

Workforce Measures

The data used for workforce measures is obtained from the Employee Engagement Survey, which is typically completed once every three years (2018 is the most recent year available).

Overall job engagement indicates the extent to which employees feel engaged in decision-making at the City.

Employee satisfaction measures the extent to which employees value, enjoy, and believe in what they do.

Business Process Measures

Percentage of roads in good condition or better measures the City's ability to manage lifecycle asset management programs for roads. Pavement condition surveys are conducted every four to five years, whereby a condition rating based on Ontario Ministry of Transportation standards is applied to every Cityowned road in Mississauga. For this measure, there is a minimum service level target of 70 per cent.

Percentage of bridges and culverts in good condition or better is a measure that indicates the City's ability to manage lifecycle asset management programs for bridges and culverts. Mandatory bridge and culvert condition surveys are performed every two years, whereby a condition rating is applied to every City-owned bridge and culvert in Mississauga. For this measure, there is a minimum service level target of 85 per cent.

Percentage of time that winter maintenance response times are met measures the frequency with which the City meets its service level objectives for winter operations.

Balanced Scorecard

Measures for Roads	2018 (Actual)	2019 (Actual)	2020 (Actual)	2021 (Plan)	2022 (Plan)	2023 (Plan)	2024 (Plan)	2025 (Plan)	
Customer:									
Citizen satisfaction with road services	N/A	69%	N/A	68%	N/A	67%	N/A	66%	
Citizen satisfaction with road safety	N/A	73%	N/A	75%	N/A	77%	N/A	79%	
Financial:	•						<u>.</u>	<u> </u>	
Average road operating cost per lane km ¹	\$1,922	\$1,866	\$2,053	\$2,156	\$2,263	\$2,377	\$2,495	\$2,620	
Average bridge/culvert maintenance cost per m ² of surface area ¹	\$5.50	\$5.49	\$8.33	\$8.74	\$9.18	\$9.64	\$10.12	\$10.63	
Average winter maintenance operating cost per lane km ¹	\$3,955	\$4,408	\$4,289	\$3,566	\$4,121	\$4,192	\$4,262	\$4,333	
Annual gross parking revenue (\$000s)	\$2,383	\$2,700	\$1,272	\$1,400	\$2,439	\$2,439	\$2,439	\$2,439	
Workforce:									
Overall job engagement	70%	N/A	N/A	72%	N/A	N/A	74%	N/A	
Employee satisfaction	75%	N/A	N/A	77%	N/A	N/A	79%	N/A	
Business Process:									
Percentage of roads in good condition or better ¹	62%	62%	62%	45%	43%	41%	39%	37%	
Percentage of bridges and culverts in good condition or better ^{1,2}	86%	83%	83%	85%	85%	85%	85%	85%	
Percentage of time that winter maintenance response times are met	100%	100%	100%	100%	100%	100%	100%	100%	

¹Ontario Municipal Performance Measurement Program (MPMP) definitions are used ²This measure has been modified in the current Business Plan to include bridges together with culverts

Awards and Achievements

Awards

The Active Transportation project team received the **2020 Excellence in Project Management** corporate award, a Project Team Award for Transportation & Works for their hard work with the Active Transportation COVID-19 Response Strategy.

Cynthia Urdaneta, Development Engineering Co-ordinator (North-Central), was the recipient of the corporate **2020 Excellence in Project Management Award – Project Lead Award** for her work on reviewing the Engineering Submission Process as part of the Lifting of the "H" and Subdivision Applications project.

Achievements

Council approved the City's first Detailed Asset Management Plan for Roads and Structures in September 2021 as part of the 2021 Corporate Asset Management Plan required by O. Reg. 588/17 – Municipal Asset Management Planning.

In May 2021, Council approved a motion to accelerate the City's Automated Speed Enforcement program and have 20 additional ASE cameras installed in 2021. This will increase the total number of cameras on Mississauga roadways from two to 22, allowing ASE units to be evenly distributed throughout the city.

Council approved a new eight-year winter maintenance contract in summer 2020 which will begin in the fall of 2021. The new winter maintenance contract will ensure that snow clearing operations are more efficient throughout the city. This includes upgrades to snow clearing equipment and salt management practices for better service delivery.

A Yard Master Plan was completed in spring 2021 to guide the expansion of yard capacity based on the Roads and Parks, Forestry & Environment Service Areas' short-, medium- and long-term yard requirements to meet service level demands over the next 25 years.

Advancing Active Transportation Initiatives

- The Micromobility Program Update: Phase 1 Visioning and Interim E-scooter Strategy was completed in 2021
- The Collegeway Cycling Infrastructure Implementation Study was completed in 2020
- Living Arts Drive protected bike lanes were installed in 2021



Living Arts Drive protected bike lane

The City made progress on Vision Zero, a strategy identified in the TMP to eliminate all traffic fatalities and serious injuries, with the installation of four pedestrian crossovers in 2021. To reduce speeding and aggressive driving, physical traffic calming (using speed humps) was approved for nine roadways. As of July 2021, passive traffic calming measures have been installed at 207 locations (15 pavement marking applications, 128 speed awareness device deployments, 55 Slow Street deployments [signage and barricades], and nine centerline flexible bollard deployments). The Neighbourhood Area Speed Limit Project has completed speed limit changes in 66 neighbourhoods in 2021 including the designation of 93 Community Safety Zones and 101 30-km/h school zone speed limits. A detailed Vision Zero Action Plan is being developed and will be in place by year end.

The 2022-2025 Business Plan Outlook

Planning for the Future

Urban Mobility

The City landscape is changing. Future transit and infrastructure demands require planning, development and implementation of our forward-thinking master plans (the Transportation, Cycling and Pedestrian Master Plans) to position ourselves as a progressive Service Area and municipality. As part of this, Roads will be looking to deliver on the short-term action plan items coming out of the TMP over the next few years.

Regional transit planning, with a focus on multi-modal transportation, is a key element of our master plans. The City will be continuing TPAPs and EAs for the Dundas BRT and the Lakeshore HOT Corridor in 2022. These transit projects will build on the extensive public stakeholder engagement that was conducted as part of the Dundas Connects Master Plan and Lakeshore Connecting Communities Transportation Master Plan. Funding for these projects can be found in the MiWay Service Area's Business Plan & Budget.

The Hurontario Light Rail Transit (HuLRT) Project is anticipated to be complete in 2024. There will be additional long-term operations and maintenance costs associated with the enhanced streetscape and "Complete Street" requirements of the project that will have to be accommodated within future operating budgets. Additional operations and maintenance costs will arise from wider sidewalks, boulevard cycling facilities, decorative paving treatments, and enhanced crosswalk paving treatments; street furniture including benches, bike racks, and waste receptacles; and bollards, retaining walls and noise walls. Additional snow removal service will also be required within the boulevard areas to address the cycling facilities, wider sidewalks and general lack of snow storage opportunities with the enhanced streetscape elements.



Hurontario median removals for HuLRT

Asset Management

In 2017, the Province of Ontario introduced Ontario Regulation 588/17, Asset Management Planning for Municipal Infrastructure, which came into effect on January 1, 2018. The regulation required all municipalities to prepare and publish a Strategic Asset Management Policy by July 1, 2019, and further requires that they prepare an Asset Management Plan for core infrastructure – which includes roads and bridges – by July 1, 2022, and complete an Asset Management Plan for all remaining non-core assets by July 1, 2024.

On June 5, 2019, the City's Strategic Asset Management Policy was approved by Council. In 2021, the Roads Service Area, in partnership with Corporate Asset Management, completed the Detailed Asset Management Plan – Roads & Structures, which was approved by Council on September 29, 2021. This plan focuses primarily on the state of the City's road pavement, bridges and culvert structures.

With these milestones achieved, the Roads Service Area will be turning its attention toward updating and expanding the Roads Asset Management Plan to include non-core assets within the Service Area. Funding approved in 2021 will be used to advance asset inventories and management plans for traffic signals, streetlights, municipal parking facilities, road signage, sidewalks, multi-use trails, and other infrastructure within the municipal public right-of-way starting in 2021 and continuing over several years. Central to this plan is the collection of detailed right-ofway infrastructure information using mobile Laser imaging, Detection and Ranging (LiDAR) technology. This technology scans the various assets contained within the road right-of-way with sufficient detail to identify and provide locational asset data, so the assets can be assembled into an inventory. Having an accurate asset inventory will assist in establishing preliminary condition estimates based on installation date or LiDAR photo information. The Asset Management Plan for non-core assets due by July 1, 2024, will contain higher-priority non-core assets. Future City Asset Management Plans will continue to expand to capture the remaining road-related assets.



Service Delivery

The City has grown substantially over the last 20 years and development continues to intensify. In addition, demand for road maintenance and higher service levels is increasing, particularly for winter maintenance. In order for the Roads Service Area to meet maintenance and operational service levels in the coming years, a Yard Master Plan was developed with a view to addressing the Roads and Parks, Forestry & Environment Service Areas' short-, medium- and long-term yard requirements.

The City has initiated the Integrated Roads Infrastructure Program to improve the planning and delivery of projects on the City's arterial and collector roads. The scope of the program includes identifying opportunities for Integrated Road Projects; developing and defining project requirements; engaging internal and external stakeholders throughout the project planning and delivery lifecycle; and developing fully budgeted and cash-flowed roadway designs that consider all City strategies relating to transportation and the environment. The successful implementation of the program will improve co-ordination of City road projects and reduce construction costs and construction nuisance for local residents through the bundling of various road improvement projects. Staffing required to implement the Integrated Roads Infrastructure Program has been requested through BR #8488 and BR #9037.

Finding Efficiencies

Lean Program

The City's Lean Program focuses on strengthening the organization's culture of continuous improvement and instills Lean concepts and principles as a way of work in every Service Area. The program focuses on maximizing customer value and minimizing waste along with empowering staff at all levels to problem-solve on a daily basis. Since becoming permanent in 2016, the Lean program has produced such enhancements as improved customer experience, faster processing times, higher quality and lower costs.

Highlights of the many projects and improvements completed include:

 Signage and Markings in Capital Projects – Reduced lead time for utility clearances of cycling infrastructure capital projects by 75 per cent

- Streetlighting Asset Status Visualization reduced the review process lead time by consolidating several data sources into one map, resulting in freed staff capacity of 816 hours per year and a cost avoidance of \$35,741
- EA Handover Process Updated and improved current business processes by standardizing handover between Transportation Projects and Capital Works staff, resulting in freed staff capacity of 156 hours per year and a cost avoidance of \$9,577
- Traffic Recoverable Streetlighting Created electronic filing system for all process contributors and reduced process lead time by 41 per cent

(Completed Ir	nitiatives	Total Benefits				
Improvement Type	2014 – 2019	2020	Up to Sep 2021	Total	Туре	Total	
Small Improvements	414	208	142	764	Cost Savings and Avoidance	\$4,663,440	
Rapid Improvements	15	9	1	25	Customer Service Improvements 4		
Projects	10	2	0	12	Safety Improvements	177	
Total	439	219	143	801	Environmental Improvements	208	
In-progress Initiative				Goals	of the Initiative		
Signs and Pavement Marking Digital Inventory Mgmt. Process Review	tory						
Road Occupancy Permit Process Review							

Advancing the City's Strategic Plan

The City's Vision and Strategic Plan are the starting points for our annual business planning and budgeting cycle. The 40-year Strategic Plan, Our Future Mississauga, is built on five pillars – **move, belong, connect, prosper, and green**. Business Plans are designed to strengthen aspects of these pillars to support the attainment of Mississauga's Vision.

Below are examples of how the initiatives of the Roads Service Area relate to the Strategic Plan pillars.

move – developing a transit oriented city

- Actively developing and implementing master plans, programs and projects that encourage transit usage, including the TMP, the Transportation Demand Management Strategy, and various Metrolinx initiatives
- Continuing TPAPs and EAs for the Dundas BRT and Lakeshore HOT corridor
- The ATMS will allow staff to better respond to changing traffic conditions, and adjust traffic signals at busier times to keep the City moving. ATMS will also allow Transit Signal Priority at some intersections to provide more priority to buses
- Prioritizing faster winter maintenance on priority sidewalks and at bus stops

belong – ensuring youth, older adults and new immigrants thrive

- Continuing to meet and exceed Accessibility for Ontarians with Disabilities Act requirements through the installation of tactile warning strips and audible pedestrian signals
- Ensuring those with accessibility needs can navigate the public right-of-way safely during construction works on City streets

connect – completing our neighbourhoods

 Advancing toward our Vision Zero goals by implementing various safety-related action items identified in the TMP and developing and implementing the Vision Zero Action Plan



- The Integrated Roads Infrastructure Program is underway to ensure that opportunities for improvements to all elements within the road right-of-way are identified and integrated into major road projects
- Development of Asset Management Plans for the City's roads and bridges ensures that this infrastructure is kept in a state of good repair for all road users and that investments are made at the right time to maximize the service life of this infrastructure
- Sidewalk improvement initiatives keep our existing network in a state of good repair, allowing residents to navigate sidewalks safely and increase walkability in neighbourhoods
- Improving how we communicate with residents and property owners about our Capital Works Program will ensure that they are kept informed and allow the construction projects to be delivered safely and efficiently
- Effectively addressing vehicle operating speeds through programs such as Automated Speed Enforcement, Slow Streets, and Neighbourhood Area Speed Signs will keep our residents connected in an environment made safer for everyone

- Enhancing how development applications are processed will ensure the City's ongoing support of intensification, and ensure conformance with the provincial Growth Plan
- The 2018 Cycling Master Plan provides a framework for increasing the amount of safe, connected, convenient and comfortable cycling infrastructure that will contribute to safer cycling in our city and ultimately achieve our vision of increasing the number of residents who choose to cycle

prosper – cultivating creative and innovative businesses

- Providing a road, transit, and pedestrian network that supports our corporate centres to ensure fast and efficient access to these employment nodes
- Development activity in the City continues to grow both in number and complexity of applications. In order to ensure that the City can continue to provide a high level of service to the development community additional resources are being requested

green - living green

- Cycling and walking are embedded in our Strategic Plan; cycling and pedestrian facilities translate into a healthier, more environmentally-friendly, multi-modal city
- The phased implementation of the Cycling and Pedestrian Master Plans, and the Transportation Demand Management Strategy ensure that more green infrastructure and transportation options are to come
- Improved monitoring of maintenance works by utility companies will support the City's commitment to protecting the environment, including the proper restoration of sod/grass and protection of trees
- Strengthening the LED streetlighting system performance will lead to reduced energy consumption



Transforming Service with Technology

Technology plays a critical role in the delivery of efficiencies for the Roads Service Area. Through updating existing technology systems and bringing new systems online, the Roads Service Area will continue to improve service delivery for road users and focus on increasing efficiencies.

Online Road Occupancy Permit Process

The Technical Services, Geospatial Solutions and Transportation Asset Management sections are working collaboratively to launch the online road occupancy permit process including payment of fees to an online system. Staff are expecting to begin launching the online system at the beginning of 2022.

Smart Streetlight Monitoring System

The City incorporated advanced streetlighting technology into its infrastructure, which allows remote controlling and monitoring of streetlights, reducing electricity and maintenance costs. The Streetlighting Unit is participating in a 5G Pilot Project to identify recommendations and opportunities to influence how 5G is implemented in the City of Mississauga.

Automated Speed Enforcement (ASE)

Traffic Management continues to invest in infrastructure enhancements to support Vision Zero, including Automated Speed Enforcement (BR #8556), Automated School Bus Cameras (BR #9073), and pursuing a future technology in the form of red light cameras. ASE is an important technology tool intended to supplement existing police enforcement in order to reduce vehicle speeds and deliver on the actions in the TMP.

ProjectWise

ProjectWise was implemented in the Capital Works section in 2020 and is targeted for rollout to the remainder of the Infrastructure Planning and Engineering Services Division in

2022/2023 for capital projects managed by the other sections. This system helps manage, share and distribute project-related content and allows for project review in a single platform. This will allow for easy access to documents and more efficient project management and collaboration.

Advanced Transportation Management System (ATMS)

The ongoing development of a proactive ATMS will allow the City to actively monitor travel conditions, influence the operation of traffic signals, disseminate information and interact with transportation modes and agencies, with an overall view to reducing congestion and its effects on the road network. The goal of the ATMS is to reduce congestion where possible, and to assist all users of the road network.

Leveraging Mobile Technology to Inventory and Inspect Assets

Over the past two years, six MicroStation-based mobile applications were replaced with more modern and efficient ESRIbased solutions. The ESRI-based solution reduces data handling, provides staff with direct access to asset inventory data in the field, consolidates asset inventory information into a single map-based enterprise data warehouse, integrates asset inventory data directly to the City's INFOR work order system and enables the use of map-based dashboards to track asset inspection progress and results. The new applications streamline the collection of inspection information for noise walls, retaining walls, sidewalks, street signs and streetlights and provide the City's Parking Enforcement Team with direct access to the latest "No Parking Zone" information. In addition, a new ESRI-based application was developed to improve collaboration between the City and utility agencies to better plan and co-ordinate road construction activity.

Maintaining City Infrastructure

To ensure Roads Service Area infrastructure is responsibly maintained, we must define a reasonable state of good repair and set priorities to maintain this state of good repair. This involves addressing growth concerns and developing an economic lens for infrastructure.

Many initiatives are planned in order to both maintain and support Mississauga's infrastructure needs. These include the following proposed Budget Requests.

Improvement to Capital Works Program Delivery (BR #5986, BR #9037)

Added together, the proposed budgets (2022-2025) for the Roads and Stormwater capital programs average \$129 million annually. This dollar volume of work necessitates an increase in the current staff complement in order to ensure the ongoing delivery of these critical programs. The new Landscape Architect position will support the design of an enhanced urban public realm and will provide streetscape design input at the planning and programming stages of Integrated Road Projects.

Project Co-ordinator – Integrated Roads Infrastructure Projects (BR #8488)

Over the next five years, approximately 118.5 kilometres or 32 per cent of the City's major collector and arterial roads will require pavement rehabilitation. This will provide a significant number of opportunities to address other infrastructure renewal and improvement needs concurrently within the roadway corridor. This new position will support the delivery of the Integrated Roads Infrastructure Program by strategically aligning, co-ordinating and programming capital renewal and improvement needs and opportunities for design and construction.

What have we done?

The following infrastructure improvements and accomplishments have been achieved over the past year in order to maintain our infrastructure in a state of good repair:

- Rehabilitated 56 kilometres of roads and two bridge/culvert structures
- Completed 3.8 kilometres of sidewalk improvements
- Constructed 10.9 kilometres of multi-use trails
- Replaced 0.4 kilometres of new noise barriers
- Completed four intersection improvements
- Rebuilt three traffic signals
- Installed 16 audible pedestrian signals and five new traffic signals
- Installed passive traffic calming at 207 locations (15 pavement marking applications, 128 speed awareness device deployments, 55 Slow Street deployments [signage and barricades], and nine centerline flexible bollard deployments)
- Completed five EAs
- Reviewed/inspected approximately 1,850 new building permit applications, serviced 75 servicing/municipal works/development/condominium agreements, and responded to over 1,000 service requests
- Processed approximately 60 rezoning applications, 40 draft plan of subdivision applications, 35 condominium applications, 740 site plan applications, 30 shoring permits, and 30 development-related agreements

People and Culture

A municipality is a service organization, and people deliver services. The continuous understanding, balancing and development of the City's workforce are essential to its members' success in delivering superior service. The following describes this Service Area's people, and its plans to foster the supportive culture that enables them to succeed in their work with trust, quality and excellence.

Workforce Analytics

The Roads Service Area faces similar challenges to those experienced by other large operational environments when it comes to competing for, attracting and retaining skilled talent to address growth needs and manage impending turnover due to retirements. Eighty-eight employees and 26 leaders from the Roads Service Area are eligible to retire in the period 2022-2025. Roads has introduced talent management and succession planning programs targeted at addressing the anticipated significant turnover of staff in key areas.

Our Structure

The Roads Service Area is made up of three divisions, which in tandem provide effective and efficient planning, design, construction, operation, maintenance and overall governance of Mississauga's roadways, bridges, sidewalks and related infrastructure:

- Infrastructure Planning and Engineering Services (IPES)
- Traffic Management and Municipal Parking (TMMP)
- Works Operations and Maintenance (WOM)

Our Talent

The Roads Service Area is made up of a mix of highly skilled technical staff with various professional backgrounds, complemented by skilled and highly dedicated front-line service delivery staff. The following is being done to foster a culture of

motivated career development and employee engagement and innovation:

- Roads Service Area staff are trained on continuous improvement and project management best practices (e.g., Lean, Project Management Professional [PMP] certification)
- Support is provided to staff to gain and maintain relevant accreditation, e.g., Certified Engineering Technologist (C.E.T.), Professional Engineer (P. Eng.), PMP designations

Critical Roles/Functions to Achieve Business Goals

Engineers and Technologists play critical roles in delivering the services within the Roads Service Area. The roles that they fulfill include Capital Project Managers, who are responsible for the design, construction and rehabilitation of roads, bridges, culverts and active transportation infrastructure; Transportation Project Engineers, who carry out EA studies for modifications to our road network and co-ordinate major road projects; and Traffic Planning Technologists, who review the traffic operations impacts of development applications. Additional key roles within the Service Area include Geotechnical and Contract Compliance Co-ordinators, and Surveyors and Inspectors, who provide services to Capital Works, Maintenance Contracts, Development Construction and other key clients.

Talent Needs

As workforce demographics continue to change, the Roads Service Area has introduced initiatives to address turnover and obtain the best candidates for future positions. The following initiatives have been put in place to manage the future changes to our workforce:

 Talent management and succession planning programs targeted at addressing the anticipated significant turnover of staff in key areas

- The Supervisory Development Program, which was introduced by WOM in 2017, continues to help staff advance their careers by preparing them to take on more senior roles. Eight graduates of the program have secured new positions with greater levels of responsibility within the Service Area
- Leveraging of co-op student opportunities and relationshipbuilding with local technical school communities
- The Engineer-in-Training Internship Program, which was introduced in 2016 and which has produced three graduates who have now secured permanent positions within the Service Area, demonstrating the success of the program. A second cohort of engineering interns started in the fall of 2020 in order to ensure the continued training and development of people with civil engineering skill sets for upcoming positions within the Roads Service Area
- The Technologist Internship Program, introduced in 2019, which aims to produce trained, experienced and certified Technologists that are qualified to take on permanent positions that become available due to retirements. The Service Area is looking forward to expanding this successful program in future years
- As the City grows and its needs change, Roads continually assesses the design and composition of its workforce to ensure its ongoing suitability for the required work. In addition to fostering excellence in our current dynamic workforce, there are upcoming needs to strategically expand our workforce. At this time, it is essential to expand the workforce so we can continue to provide the services necessary to design, construct, operate and maintain the City's road-related assets. Within the four-year budget cycle, the following requests for new full-time staff positions are included:
 - One Supervisor, Design and Contract Administration in 2022 and one Business Advisor in 2023 will provide the staffing level required to deliver future Capital Programs (BR #5986)

- One new Project Co-ordinator in 2022 to support the delivery of the Integrated Roads Infrastructure Program (BR #8488)
- One Traffic III position and one Traffic IV position in 2022 to provide the necessary capacity for administration of an enhanced Automated Speed Enforcement program, and for the operation and maintenance of ASE field equipment (BR #8556)
- One Environmental Technologist in 2022 to increase the level of available staff resources to keep pace with the growth and complexity of development applications (BR #9035)
- One Development Engineering Technologist in 2022 to review development applications, engineering submissions and other ancillary permits to keep pace with the growth and complexity of development applications (BR #9036)
- One Landscape Architect in 2022 to ensure a comprehensive and co-ordinated design approach to the public realm (BR #9037)
- One Assistant Supervisor in 2022 to provide support to the Maintenance Standards and Permits Unit Supervisor, to support in undertaking process reviews, and to explore innovative ways to improve efficiency and service delivery for the unit's many internal and external clients (BR #9072)

There is a net addition of 34.75 FTEs in Roads in 2022: nine additional contract capital-funded FTEs (all of which will end by 2024); 20 additional contract FTEs for 2022 Election Sign Removal; eight new FTEs from 2022 BRs; and net reduction of two FTEs as a result of transfers between Service Areas (four to Legislative Services, two from Stormwater).

Proposed Full-time Equivalent Staffing Distribution by Program

Program	2021	2022	2023	2024	2025
Cleaning and Litter Pick-up	1.9	1.9	1.9	1.9	1.9
Corporate Fleet Maintenance	28.5	28.5	28.5	36.0	37.0
Crossing Guards	82.7	82.7	82.7	82.7	82.7
Infrastructure Planning & Engineering	87.0	93.8	93.8	96.8	96.8
Maintenance Control	137.4	134.4	134.4	131.4	131.4
Municipal Parking	8.0	13.0	7.0	7.0	7.0
Road Sidewalk Maintenance	0.0	0.0	0.0	2.0	2.0
Streetlighting	8.0	8.0	3.0	3.0	3.0
Survey & Inspection	61.8	63.8	62.8	62.8	62.8
Traffic Management	74.6	98.6	83.6	83.6	84.6
Winter Maintenance	3.1	3.1	3.1	3.1	3.1
Total Service Distribution	492.9	527.7	500.7	510.2	512.2

Proposed Operating Budget

This part of the Business Plan sets out the financial resources required to deliver the proposed 2022-2025 Business Plan. Information is provided by major expenditure and revenue category as well as by program. The costs to maintain existing service levels and operationalize prior decisions are identified separately from proposed changes. The budget for 2021 was \$66.8 million and the proposed budget for 2022 is \$69.3 million.

Total Changes to Maintain Current Service Levels

The impact of maintaining current service levels for the Roads Service Area is a net increase of \$3,506,000. Highlights include:

- Increase of \$2,601,000 reflecting labour adjustments and other fringe benefit increases including \$356,000 increase for Election Sign Removal and \$836,000 net reduction in labour capital cost recoveries for the neighborhood speed limit initiative
- Increase of \$1,167,000 in sidewalk maintenance costs, fully offset by an increase in recoveries
- Increase of \$574,000 in traffic control signals maintenance
- Increase of \$515,000 in the Automated Speed Enforcement Program
- Decrease of \$376,000 in utility costs
- Increase of \$500,000 in maintenance fee collected
- Decrease of \$514,000 in Traffic Management fees and recoveries

Efficiencies and Cost Savings

Highlights include:

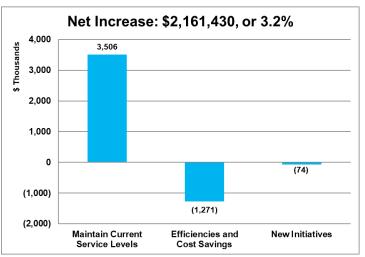
- Savings of \$600,000 in new winter maintenance contract
- Savings of \$250,000 in streetlighting hydro (electricity)
- Reduction in various operating expenses of \$372,000

New Initiatives

Eight new initiatives are proposed for 2022, with a net revenue impact of \$74,000. They are:

- Improvement to Capital Works Program Delivery (BR #5986)
- Project Co-ordinator Integrated Road Infrastructure Projects (BR #8488)
- Automated Speed Enforcement Phase 2 (BR #8556)
- Environmental Technologist (BR #9035)
- Development Engineering Technologist (BR #9036)
- Improvement to Capital Works Program Delivery Landscape Architect (BR #9037)
- Assistant Supervisor Maintenance Standards and Permits Unit (BR #9072)
- Automated Enforcement School Bus Cameras (BR#9073)

Proposed Changes for 2022 Net Operating Budget by Category



Operating Budget Details

The following table identifies the budgeted and forecasted operating expenditures and revenues for 2022-2025, as well as the 2021 Budget and the 2020 actuals by major program within the Service Area.

Proposed Budget by Program

Description	2020 Actuals (\$000s)	2021 Budget (\$000s)	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Forecast (\$000s)
Expenditures to Deliver Current Services						
Bridges & Watercourses	849	387	487	487	487	487
Cleaning and Litter Pick-up	4,459	3,659	3,663	3,665	3,666	3,668
Corporate Fleet Maintenance	798	239	380	431	483	537
Crossing Guards	2,292	3,609	3,698	3,759	3,820	3,882
Infrastructure Planning & Engineering	5,342	6,650	7,332	7,103	7,147	7,306
Maintenance Control	11,591	9,655	9,443	9,640	9,843	10,058
Municipal Parking	1,447	2,546	2,529	2,483	2,441	2,453
Road Sidewalk Maintenance	13,410	10,455	11,316	11,316	11,316	11,316
Streetlighting	6,234	6,408	5,786	5,955	6,009	6,063
Survey & Inspection	968	1,734	1,979	2,181	2,307	2,414
Traffic Management	13,100	13,903	16,921	16,690	16,708	16,857
Winter Maintenance	25,594	25,695	25,395	25,408	25,411	25,414
Total Expenditures	86,084	84,940	88,929	89,118	89,639	90,455
Revenues	(16,789)	(15,578)	(17,137)	(17,094)	(17,102)	(17,102)
Transfers From Reserves and Reserve Funds	(2,405)	(2,517)	(2,712)	(1,519)	(1,361)	(1,368)
New Initiatives			(74)	36	1,032	1,536
Proposed Net Budget	66,890	66,845	69,007	70,541	72,208	73,521
Expenditures Budget - Changes by Year			5%	0%	1%	1%
Proposed Net Budget - Changes by Year			3%	2%	2%	2%

Summary of Proposed Budget

The following table shows the proposed budget changes by description and category. Costs (labour; operational costs; and facility, IT and support costs) and revenues are shown by category with the approved 2021 budget for comparison. The three columns to the far right of the table show the totals proposed for 2022 and their dollar and percentage changes over 2021. The second table summarizes the proposed 2022 budget and 2023-2025 forecasts.

Summary of Proposed 2022 Budget

Description	2021 Approved Budget (\$000s)	Maintain Current Service Levels (\$000s)	Efficiencies and Cost Savings (\$000s)	Annualized Prior Year's Budget Decisions (\$000s)	Operating Impact of New Capital Projects (\$000s)	Proposed New Initiatives (\$000s)	Special Purpose Levies (\$000s)	Proposed 2022 Budget (\$000s)	\$ Change Over 2021 (\$000s)	% Change Over 2021
Labour & Benefits	34,664	1,830	(11)	785	(2)	336	0	37,602	2,937	8%
Operational Costs	48,886	2,845	(1,260)	0	(203)	2,873	0	53,141	4,255	9%
Facility, IT and Support Costs	242	0	0	0	0	0	0	242	0	0%
Transfer To Reserves & Reserve Funds	1,148	6	0	0	0	1,119	0	2,273	1,125	98%
Total Gross Expenditures	84,940	4,682	(1,271)	785	(205)	4,328	0	93,258	8,318	10%
Total Revenues	(15,578)	(1,660)	0	0	100	(4,402)	0	(21,539)	(5,962)	38%
Transfer From Reserves & Reserve Funds	(2,517)	(195)	0	0	0	0	0	(2,712)	(195)	8%
Total Net Expenditures	66,845	2,827	(1,271)	785	(105)	(74)	0	69,007	2,161	3%

Summary of Proposed 2022 Budget and 2023 - 2025 Forecasts

Description	2020 Actuals (\$000s)	2021 Approved Budget (\$000s)	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Fore cast (\$000s)
Labour & Benefits	32,665	34,664	37,602	38,504	40,656	42,082
Operational Costs	51,816	48,886	53,141	63,702	62,767	62,147
Facility, IT and Support Costs	242	242	242	242	242	242
Transfer To Reserves & Reserve Funds	1,361	1,148	2,273	8,655	13,479	19,216
Total Gross Expenditures	86,084	84,940	93,258	111,103	117,144	123,686
Total Revenues	(16,789)	(15,578)	(21,539)	(38,303)	(42,294)	(47,287)
Transfer From Reserves & Reserve Funds	(2,405)	(2,517)	(2,712)	(2,259)	(2,641)	(2,879)
Total Net Expenditures	66,890	66,845	69,007	70,541	72,208	73,521

Proposed Cost Increase Required to Maintain Current Service Levels

The following table provides detailed highlights of budget changes by major cost and revenue category. It identifies the net changes to maintain current service levels, taking into account efficiencies, cost savings, and cost increases arising from prior-year decisions.

Category	2021 Budget (\$000s)	2022 Proposed Budget (\$000s)	Change (\$000s)	Details (all values in thousands)
Labour and Benefits	34,664	37,266		Increase reflects labour, other fringe benefit changes and: \$836 Net reduction in labour capital cost recoveries for neighborhood speed limit \$356 Increase for Election Sign Removal initiative
Administration and Support Costs	242	242	0	
Advertising & Promotion	145	188		Various cost increases
Communication Costs	600	519	(82)	(\$38) Fibre network moved to the City's fibre network resulting in savings (\$47) Efficiencies
Contractor & Professional Services	34,837	36,667	1,830	\$1,167 Increase in sidewalk maintenance costs - offset by increase in recoveries \$574 Increase in costs for traffic control signals maintenance \$515 Increase in costs for Automated Speed Enforcement Program \$373 Annualization of winter maintenance contract (\$200) Transfer of road crack sealing program to capital (\$600) Efficiencies from new winter maintenance contract
Equipment Costs & Maintenance Agreements	769	873	103	Various cost increases
Finance Other	98	87	(12)	Various cost decreases in Fleet Maintenance
Materials, Supplies & Other Services	8,928	9,074	146	\$86 Cost increases in Traffic Management \$109 Cost increases in Fleet Maintenance (\$46) Preventative maintenance and parts savings from Telematics project
Occupancy & City Costs	7,214	6,623	, ,	(\$372) Utility cost reductions (\$250) Streetlighting Hydro savings \$14 Hydro costs for Electric Vehicle Charging Infrastructure project \$13 Stormwater charges \$7 Miscellaneous cost increase
Staff Development	197	192	(5)	Efficiencies
Transfers To Reserves and Reserve Funds	1,148	1,154	6	Increase Municipal Parking reserve transfer
Transportation Costs	(3,903)	(3,953)	(51)	\$25 Increase in vehicle rental costs in Traffic Management \$25 Vehicle Rental cost for Election Sign Removal initiative (\$10) Efficiencies (\$23) Reduction in vehicle supplies from Electric Vehicle Charging Infrastructure project (\$64) Cost decreases in Fleet Maintenance
Subtotal - Other Operating Costs	50,275	51,664	1,388	
Total Revenues	(15,578)	(17,137)	(1,560)	\$514 Net decrease in Traffic Management fees and recoveries \$100 Transfer of road crack sealing program to capital (\$1,167) Increase in Sidewalk Utility Restoration external recoveries (\$500) Increase in maintenance fees collected (\$500) Increase in Leaf Collection recoveries
Transfers From Reserves and Reserve Funds	(2,517)	(2,712)	(195)	\$700 Decrease transfer from Winter Maintenance Reserve (\$895) Increase transfer from Reserve for the Automated Speed Enforcement Program
Subtotal - Revenues	(18,095)	(19,849)	(1,754)	
Total	66,845	69,080	2,235	

Proposed New Initiatives

This table presents the costs by Budget Request (BR) for proposed new initiatives. Each BR is numbered. Detailed descriptions of any year one and year two BRs can be found in the pages following the table.

Description	BR#	2022 FTE Impact	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Forecast (\$000s)	2022 to 2025 FTE Impact	2022 to 2025 Capital (\$000s)
Improvement to Capital Works Program Delivery	5986	1.0	0	103	136	139	2.0	28
Project Co-ordinator – Integrated Road Infrastructure Projects	8488	1.0	(44)	(64)	(65)	(66)	1.0	4
Maintenance and Repair Resourcing for Fleet Services	8520	0.0	0	0	471	618	5.0	0
Safety, Compliance and Training for Fleet Services	8521	0.0	0	0	167	368	3.5	0
Addressing the Sidewalk Repair Backlog	8524	0.0	0	0	179	241	2.0	4,035
Expanded Internship Program	8553	0.0	0	0	147	240	3.0	0
Neighbourhood Speed Management Program	8555	0.0	0	0	0	0	8.0	1,630
Automated Speed Enforcement – Phase 2	8556	2.0	0	0	0	0	2.0	8
Environmental Technologist	9035	1.0	0	0	0	0	1.0	4
Development Engineering Technologist (North/Central Area)	9036	1.0	0	0	0	0	1.0	4
Improvements to Capital Works Program Delivery - Landscape Architect	9037	1.0	0	0	0	0	1.0	4
Assistant Supervisor - Maintenance Standards and Permits Unit	9072	1.0	(30)	(3)	(3)	(3)	1.0	4
Automated Enforcement - School Bus Cameras	9073	0.0	0	0	0	0	0.0	0
Total		8.0	(74)	36	1,032	1,536	30.5	5,719

Note: Numbers may not balance due to rounding. Numbers are net.

Budget Request #: 5986

Proposed InitiativeDepartmentService AreaImprovement to Capital WorksTransportation & WorksRoads

Program Delivery Department

Description of Budget Request

This Budget Request is seeking approval for an increase in the current staffing level and range of skills of the Capital Works Delivery Section by two permanent FTEs: one capital-funded Supervisor, Design and Contract Administration in 2022 and one operating-funded Business Advisor in 2023.

Required Annual Operating Investment

Impacts (\$000s)	2022	2023	2024	2025
Gross Expenditures	0.0	103.1	136.0	138.7
Reserves & Reserve Funds	0.0	0.0	0.0	0.0
User Fees & Other Revenues	0.0	0.0	0.0	0.0
Tax Levy Requirements	0.0	103.1	136.0	138.7
* Net Change in \$		103.1	32.9	2.7
FTEs	1.0	2.0	2.0	2.0

^{*}In each year, all values are cumulative, not incremental.

Required Capital Investment

Total Capital (\$000s)	2021 & Prior	2022	2023	2024	2025 & Beyond
Expenditures	0.0	27.8	0.0	0.0	0.0

Why Staff Recommend this Initiative

The Roads and Stormwater capital programs include critical projects and have a forecasted average annual value of \$129 million from 2022-2025. In order to ensure the ongoing successful delivery of these important, high-value capital programs, an increase in staff resources and skills is required.

Details of Service Change

One new permanent FTE, Supervisor, Design and Contract Administration (Grade G) has been requested for April 1, 2022 for cost of \$101,576 in 2022 to be funded by capital programs. There are operating dollars requested for one new permanent FTE, Business Advisor (Grade G) as at April 1, 2023 for cost of \$102,826 in 2023.

The growth occurring in the capital programs overseen by the Roads Service Area is substantial and necessitates an increase in the current staff complement in order to ensure the ongoing delivery of these critical programs.

In addition to the growing capital programs, implementation of current programs is limited by the current staffing level, and is not keeping pace with budgeted plans. There is a backlog of capital projects that needs to be addressed, which also requires additional resources. Three capital-funded positions were approved for 2021 and will help accomplish this work: this BR addresses the two remaining planned positions.

Service Impact

These staff additions will ensure that the growing Roads and Stormwater capital programs continue to be successfully delivered. The additional resources will assist in addressing the current backlog of capital projects. The addition of the Supervisor, Design and Contract Administration in 2022 will assist with business process improvements. The addition of the Business Advisor will assist in analyzing, identifying and implementing business process improvements to ensure the efficient planning, programming and delivery of the capital program.

Budget Request #: 8488

Proposed Initiative	Department	Service Area
Project Co-ordinator – Integrated	Transportation & Works	Roads
Road Infrastructure Projects	Department	

Description of Budget Request

This Budget Request is for a Project Co-ordinator position in the Transportation Infrastructure Management Section, starting April 2022. This permanent position will be responsible for co-ordination of the Integrated Roads Infrastructure Program, capital budget preparation, and related pre-planning activities. The cost of this position will be funded by tax and offset by recoveries from the capital budget.

Required Annual Operating Investment

Impacts (\$000s)	2022	2023	2024	2025
Gross Expenditures	(43.5)	(63.6)	(64.8)	(66.1)
Reserves & Reserve Funds	0.0	0.0	0.0	0.0
User Fees & Other Revenues	0.0	0.0	0.0	0.0
Tax Levy Requirements	(43.5)	(63.6)	(64.8)	(66.1)
* Net Change in \$		(20.1)	(1.2)	(1.2)
FTEs	1.0	1.0	1.0	1.0

^{*}In each year, all values are cumulative, not incremental.

Required Capital Investment

Total Capital (\$000s)	2021 & Prior	2022	2023	2024	2025 & Beyond
Expenditures	0.0	3.8	0.0	0.0	0.0

Why Staff Recommend this Initiative

The requested staff resource will improve capital project planning, integration and budgeting, through enhanced co-ordination with internal and external partners, leading to improved services, fewer disruptions to residents, and reduced capital costs over the long term. The Project Engineers will have time to deliver more capital projects – a growing pressure – and communications with the public and ward councillors regarding the capital program will be enhanced and led by a dedicated position.

Details of Service Change

The Project Co-ordinator position will be recruited by April 2022, will report to the Manager, Transportation Projects within the Transportation Infrastructure Management section, and will receive functional guidance from the Project Engineers. The Project Co-ordinator will be dedicated to a significant number of pre-planning duties currently led by the Project Engineers, including co-ordination of the Integrated Roads Infrastructure Program, the capital budget preparation, regular updates of project cost estimates and unit rates, production and maintenance of public-facing capital plan information, and the semi-annual ward briefing notes, allowing the Project Engineers to focus on the growing demand to deliver capital projects. The time spent by the Project Engineers delivering capital projects will be formally tracked and the related costs will be recovered by the section's operating cost centre from the capital budgets of those projects. The annual value of these capital recoveries will meet or exceed the operating pressure created by the new position. The change will result in a net reduction to the operating budget of approximately \$242,000 over four years; and result in a net increase in pressure to the capital budget of approximately \$713,000 over four years.

Service Impact

Implementing this initiative will improve the planning co-ordination of infrastructure improvements which advances the City's strategic goals; improve the delivery of infrastructure improvements within the right-of-way; increase the number of opportunities that can be realized to improve infrastructure elements within a newly rehabilitated corridor; reduce long-term capital improvement and renewal costs; improve the ability to communicate about the City's infrastructure planning and construction programs with the public; improve the effectiveness of Project Engineers' time, allowing them to deliver more projects per year; and improve the ability to account for the cost of delivering capital projects.

Budget Request #: 8556

Proposed Initiative Department Service Area

Automated Speed Enforcement – Transportation & Works
Phase 2 Department

Description of Budget Request

This Budget Request is for additional operating budget to support the expanded Automated Speed Enforcement (ASE) program approved through Council Resolution 0105-2021. To support the ongoing program, two FTEs are required beginning in 2022: one WOM Traffic III and one WOM Traffic IV. Additional resources associated with the Administrative Penalty System (APS) expansion and operations are also identified and included.

Roads

Required Annual Operating Investment

Impacts (\$000s)	2022	2023	2024	2025
Gross Expenditures	3,510.0	7,903.5	13,177.7	19,331.0
Reserves & Reserve Funds	0.0	0.0	0.0	0.0
User Fees & Other Revenues	3,510.0	7,903.5	13,177.7	19,331.0
Tax Levy Requirements	0.0	0.0	0.0	0.0
* Net Change in \$		0.0	0.0	0.0
FTEs	2.0	2.0	2.0	2.0

^{*}In each year, all values are cumulative, not incremental.

Required Capital Investment

Total Capital (\$000s)	2021 & Prior	2022	2023	2024	2025 & Beyond
Expenditures	0.0	7.6	0.0	0.0	0.0

Why Staff Recommend this Initiative

Phase 1 of ASE was approved through the 2020 budget process and is a limited deployment program which began operation in 2021. Council Resolution 0105-2021 provided additional Traffic Management and Municipal Parking resources necessary to support an expanded program including 22 cameras. Mississauga residents and members of Council have supported and approved the Transportation Master Plan with all of the contained speed management goals and action items that ASE is designed to fulfill.

Details of Service Change

Significant resources will be required in order to support the expanded ASE program, beginning with an estimated two FTEs and a \$7,486,000 budget, required for program operations.

It is anticipated that significant further APS and processing resources will be necessary to accomplish the processing of charges and administration of the dispute and resolution process. Preliminary estimates are for 25 FTEs and budget of \$12,780,000: actual requests for FTEs and budget dollars related to APS requirements will be made through future BRs.

It is expected that ASE will become revenue positive once operational in 2022. Program revenue is estimated to be in excess of \$43,000,000 between 2022 and 2025, which will more than offset operating costs. Excess revenues (net of expenses) achieved through this initiative will be transferred into a reserve and will fund future road safety initiatives.

Service Impact

Additional ASE cameras and staff resources will help to address more identified speeding concerns on City roadways, helping to reduce speed-related incidents and making Mississauga's roadways safer for all users. As part of the City's Vision Zero framework and Road Safety Program, ASE is a key initiative to help reduce vehicle operating speeds and create safer roadways.

Budget Request #: 9035

Proposed Initiative Department Service Area

Environmental Technologist Transportation & Works Roads
Department

Description of Budget Request

This BR is to increase the complement of Technologists involved in the review of development applications and building permits to two by adding one permanent FTE in order to keep pace with the growth and complexity of development applications and to avoid the occurrence of a backlog.

Required Annual Operating Investment

Impacts (\$000s)	2022	2023	2024	2025
Gross Expenditures	84.2	109.4	111.2	113.0
Reserves & Reserve Funds	0.0	0.0	0.0	0.0
User Fees & Other Revenues	84.2	109.4	111.2	113.0
Tax Levy Requirements	0.0	0.0	0.0	0.0
* Net Change in \$		0.0	0.0	0.0
FTEs	1.0	1.0	1.0	1.0

^{*}In each year, all values are cumulative, not incremental.

Required Capital Investment

Total Capital (\$000s)	2021 & Prior	2022	2023	2024	2025 & Beyond
Expenditures	0.0	3.8	0.0	0.0	0.0

Why Staff Recommend this Initiative

The initiative supports IPES to continue to meet review timelines 100 per cent of the time and reduces the workload burden for existing staff. This option is revenue neutral because it will be fully funded by revenues generated from Planning Application Fees. The need to meet service level expectations for the review of development applications is critical both from a customer service perspective and to meet the City's planning and strategic objectives of being an "open for business" City.

Details of Service Change

This initiative is funded by Planning Application Fees. There is no impact to the tax rate.

Based on the 2020 Planning Application Fees actual revenue of \$1,126,984 vs. budget of \$985,958 and the 2021 fee revenue forecasted at a budget of \$1,011,248, it is anticipated that sufficient actual surplus revenue from Planning Application Fees in 2021 is available to fund two Technologist positions within IPES: the technologist being requested within this Budget Request, and the Development Engineering Technologist position that is the subject of BR #9036.

Service Impact

The benefits of dedicating one additional FTE as Technologist include:

- Compliance with the review timelines as set out by the City for submitted development applications and building permits
- Improved customer service for both internal and external stakeholders
- Resiliency within the group to maintain service levels during staff vacations and absences
- Increased morale with decreased burden on the existing Technologist
- The ability to focus on succession planning and prepare for future resourcing needs

The goal is to meet the target to complete reviews within expected timelines 100 per cent of the time to avoid the occurrence of a backlog.

Budget Request #: 9036

Proposed Initiative Department Service Area

Development Engineering Transportation & Works Roads
Technologist (North/Central Area) Department

Description of Budget Request

This BR is for a permanent Development Engineering Technologist in the Development Engineering & Construction Section for the North/Central Area, which covers Wards 3 to 7 and 9 to 11. Staffing the North/Central Area in a manner that reflects the development changes facing the City is essential to ensuring that processing of the applications is done in a comprehensive and timely manner that is responsive to market and economic investment demand.

Required Annual Operating Investment

Impacts (\$000s)	2022	2023	2024	2025
Gross Expenditures	81.6	107.8	109.7	111.6
Reserves & Reserve Funds	0.0	0.0	0.0	0.0
User Fees & Other Revenues	81.6	107.8	109.7	111.6
Tax Levy Requirements	0.0	0.0	0.0	0.0
* Net Change in \$		0.0	0.0	0.0
FTEs	1.0	1.0	1.0	1.0

^{*}In each year, all values are cumulative, not incremental.

Required Capital Investment

Total Capital (\$000s)	2021 & Prior	2022	2023	2024	2025 & Beyond
Expenditures	0.0	3.8	0.0	0.0	0.0

Why Staff Recommend this Initiative

This FTE is to support the North/Central Area to meet review timelines 100 per cent of the time. Applications continue to be more complex. Meeting service standards is critical from a customer service perspective and to meet the City's planning and strategic objectives of being "open for business". Increasing capacity to complete reviews will ensure that the Transportation & Works Department continues to provide high quality comments while striving to ensure it is done in a timely manner.

This initiative is funded by Planning Application Fees. There is no impact to the tax rate.

Based on the actual revenue from the 2020 Planning Application Fees of \$1,126,984 compared with the budgeted amount of \$985,958 and the forecasted 2021 fee revenue of \$1,011,248, it is anticipated that the projected fee revenues will be sufficient to fund the requested Development Engineering Technologist starting on April 1, 2022.

It should be noted that sufficient revenue from Planning Application Fees is available to fund two Technologist positions within IPES – the Technologist being requested within this Budget Request, and an Environmental Technologist position that is the subject of BR #9035.

Service Impact

The service impact of adding this position includes:

- Improvement in the timeliness of applications processing for development activity within the North/Central Area
- Compliance with the review timelines set out by Ontario legislation and the City
- Improved customer service for internal and external stakeholders
- Resiliency within the group to maintain service levels during staff vacations and absences
- Increased morale with decreased burden on existing Technologists, potentially leading to increased staff retention
- Maintaining an "open for business" culture by ensuring sufficient staff to manage the development activity and evolving development trends

With the additional Technologist, it is expected that service levels will increase with the goal of meeting the target to complete reviews within expected timelines 100 per cent of the time, improving overall service delivery, reducing legal exposure of non-decision within the legislated timelines, and encouraging economic investment in the City.

Budget Request #: 9037

Proposed Initiative Department Service Area

Improvements to Capital Works Program Delivery – Landscape Architect Transportation & Works Department Roads

Description of Budget Request

As the city's urban public realm is an increasingly complex environment, one permanent FTE, Landscape Architect, is needed to prepare and review the design of the urban realm for all Capital Works projects within the Integrated Roads Infrastructure Program from the planning/programming phase to the Capital Works detailed design and construction phase. The costs for this position will be recovered from the Roads Service Area capital program.

Required Annual Operating Investment

Impacts (\$000s)	2022	2023	2024	2025
Gross Expenditures	0.0	0.0	0.0	0.0
Reserves & Reserve Funds	0.0	0.0	0.0	0.0
User Fees & Other Revenues	0.0	0.0	0.0	0.0
Tax Levy Requirements	0.0	0.0	0.0	0.0
* Net Change in \$		0.0	0.0	0.0
FTEs	1.0	1.0	1.0	1.0

^{*}In each year, all values are cumulative, not incremental.

Required Capital Investment

Total Capital (\$000s)	2021 & Prior	2022	2023	2024	2025 & Beyond
Expenditures	0.0	3.8	0.0	0.0	0.0

Why Staff Recommend this Initiative

The Landscape Architect will bring new skill sets that support the design of an enhanced urban public realm that includes an unencumbered street tree corridor, a comfortable pedestrian environment and appropriate streetscape design elements. This position will provide streetscape design input at the planning and programming stages of Integrated Road Projects so that projects are properly scoped and budgeted, and will help to improve Mississauga's image as a global urban city.

This BR is to increase the Capital Works Delivery staff complement and skill set by adding one permanent FTE, a Landscape Architect, in 2022. The Landscape Architect will be tasked with developing detailed designs for boulevards on major road projects to provide for an unencumbered street tree corridor, a comfortable pedestrian environment and appropriate streetscape design elements. The Landscape Architect position is a Salary Grade F with a 2022 total cost of \$97,200. This cost will be recovered through the Roads Service Area capital program.

Service Impact

The addition of a Landscape Architect to the Capital Works Delivery team will ensure the following is achieved:

- Incorporation of an enhanced urban design into major road projects
- · Design of an unencumbered street tree corridor
- Provision of a comfortable pedestrian environment
- Incorporation of appropriate streetscape elements into road designs
- Improved co-ordination with public utilities in the design of their infrastructure to eliminate/minimize conflicts with street tree corridors
- Integration of public realm improvements into the planning and programming phases of Integrated Road Projects to ensure projects are correctly scoped and budgeted

These factors combine to create the welcoming, appealing streetscapes that contribute to Mississauga's overall attractiveness as a place to live, work, play, visit, study and invest in.

Budget Request #: 9072

Proposed Initiative Department Service Area

Assistant Supervisor – Maintenance Standards and Permits Unit Transportation & Works Department

Roads

Description of Budget Request

This request is for a permanent FTE: Assistant Supervisor, Maintenance Standards & Permits. The position will provide support to the Supervisor, resulting in more effective management of the unit, and a balance of work and supervisory responsibilities. In addition, this position will support undertaking process reviews, and exploring innovative ways to improve efficiency and service delivery for the unit's many internal and external clients. There is no impact to the tax rate.

Required Annual Operating Investment

Impacts (\$000s)	2022	2023	2024	2025
Gross Expenditures	93.9	123.0	125.0	127.0
Reserves & Reserve Funds	0.0	0.0	0.0	0.0
User Fees & Other Revenues	123.9	126.0	128.2	130.5
Tax Levy Requirements	(30.0)	(3.1)	(3.2)	(3.4)
* Net Change in \$		26.9	(0.2)	(0.2)
FTEs	1.0	1.0	1.0	1.0

^{*}In each year, all values are cumulative, not incremental.

Required Capital Investment

Total Capital (\$000s)	2021 & Prior	2022	2023	2024	2025 & Beyond
Expenditures	0.0	3.8	0.0	0.0	0.0

Why Staff Recommend this Initiative

The Maintenance Standards and Permits unit requires an Assistant Supervisor to address staffing increases and escalating service demands for the administration and technical review of permits, and to meet the evolving needs of Maintenance Standards & Permits' clients.

The position will be funded through revisions made to the User Fees and Charges By-law 0156-2019 as part of the 2022 update. Increases to various permit-related fees will offset the costs associated with the salary of the position. The increases impact all the permits that the Assistant Supervisor will be involved in. There is no impact to the tax rate.

Service Impact

The addition of this position will have the following benefits:

- Improved management and oversight of the staff
- Improved customer service to internal and external clients
- Added support for the timely investigation, response, and resolution to complaints received from residents and councillors
- Assistance with interdepartmental collaboration with staff from other City sections to determine solutions or best approaches to difficult permitting sites
- Assistance in the maintenance of permit databases and providing permitting statistics
- Ensuring that all financial and legal needs are met for the collection and/or return of fees and deposits
- Proactive exploration of new ways to improve our processes and procedures, with a view to improving effectiveness, efficiency and customer service
- Providing the necessary capacity to move a number of initiatives forward, such as documenting procedures and creating guidelines, which will ultimately improve the section's operations and performance
- Assisting in the development of an ongoing training program to ensure staff are trained to industry standards, support staff retention and improve staff morale

Budget Request #: 9073

Proposed Initiative Department Service Area

Automated Enforcement – Transportation & Works Roads
School Bus Cameras Department

Description of Budget Request

This Budget Request is for the resources required to administer the City's portion of an Automated School Bus Camera program being developed by the Region of Peel. This includes costs associated with administration of the program; the operation and maintenance of field equipment such as cameras; charges generated; and revenue. Additional resources associated with Provincial Court System or APS expansion are not included and will be addressed through a separate process.

Required Annual Operating Investment

Impacts (\$000s)	2022	2023	2024	2025
Gross Expenditures	600.0	12,960.0	11,664.0	10,497.6
Reserves & Reserve Funds	0.0	0.0	0.0	0.0
User Fees & Other Revenues	600.0	12,960.0	11,664.0	10,497.6
Tax Levy Requirements	0.0	0.0	0.0	0.0
* Net Change in \$		0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0

^{*}In each year, all values are cumulative, not incremental.

Required Capital Investment

Total Capital (\$000s)	2021 & Prior	2022	2023	2024	2025 & Beyond
Expenditures	0.0	0.0	0.0	0.0	0.0

Why Staff Recommend this Initiative

Regional Council has directed Peel Region staff to oversee the development and implementation of a stop-arm camera program for Peel Region. The City has long been supportive of technology that improves road safety and addresses dangerous and aggressive driving behaviour. Beginning in April of 2017, Council has passed a variety of motions in support of automated enforcement of the law that prohibits the passing of stopped school buses.

Mississauga is an equal partner with the other cities in the Region of Peel in enforcement of the prohibition against the passing of school buses. A Transportation & Works budget of \$35,721,600 is required from 2022 to 2025 for vendor services in order to participate in the implementation of the School Bus Stop Arm Camera program. Program revenue for the same period is estimated to be in excess of \$35,721,600, which will fully offset operating costs.

Council will be presented with an option to fulfill the direction from Regional Council. Approval of this BR will position Council to affirm participation in this Regional initiative with a vote.

No additional Transportation & Works staff are required for the administration of this program. Transition to APS is expected to occur in parallel to changes to ASE and additional office space and staffing requirements are to be requested through the budgeting process over time as required.

Service Impact

The implementation of this program will reduce the occurrences of vehicles passing stopped school buses by approximately 20 per cent over five years, increasing road safety. A School Bus Stop Arm Camera program will further the City's Vision Zero goals and create safer roadways for all road users.

Proposed Capital Budget

This section summarizes the forecast 10-year capital requirements for this service. The following table presents the forecast by major program.

Proposed 2022-2031 Capital Budget by Program

Program Expenditures	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Forecast (\$000s)	2026-2031 Forecast (\$000s)	2022-2031 Total (\$000s)
Active Transportation	9,370	11,420	15,170	7,673	54,520	98,153
Bridge & Structure Renewal	7,200	7,500	7,500	7,500	38,450	68,150
Environmental Management	0	188	188	375	2,250	3,000
Major Road Construction	12,872	19,435	31,540	6,673	96,812	167,332
Municipal Parking	620	100	100	100	600	1,520
Noise Wall Infrastructure	7,575	4,651	2,815	1,812	9,565	26,418
Roadway Rehabilitation	30,370	26,604	30,876	43,172	416,589	547,611
Traffic Management	8,900	8,400	7,970	6,510	38,810	70,590
Works Fleet and Equipment Management	4,455	4,195	4,376	4,441	28,746	46,212
Works Improvement	400	250	0	350	1,750	2,750
Total	81,762	82,742	100,534	78,606	688,092	1,031,735

Note: Numbers may not balance due to rounding. Numbers are gross.

Proposed 2022-2031 Capital Forecast Highlights:

- Road Rehabilitation (Integrated, Residential and Non-Residential) (2022-2031) \$546.6 million
- Road Improvements (2022-2031) \$112 million
- Bridge & Infrastructure Renewal and Appraisal (2022-2031) \$68.1 million
- Cycling Programs (Improvements, Structures, Major Roads) (2022-2031) \$62.8 million
- Traffic Signals (2022-2031) \$41.5 million
- Vehicle & Equipment Replacement (2022-2031) \$39.8 million
- Sidewalks (2022-2031) \$32.5 million
- Streetlighting (2022-2031) \$23.3 million

Proposed 2022-2031 Capital Budget by Funding Source

The following table provides the funding sources proposed to fund the capital portion of the proposed 2022-2025 Business Plan & 2022 Budget and the consolidated forecast for 2026-2031.

Funding	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Forecast (\$000s)	2026-2031 Forecast (\$000s)	2022-2031 Total (\$000s)
Tax Capital	13,071	11,560	20,123	23,383	344,107	412,244
Planning Act Reserve Funds	520	0	0	0	0	520
Development Charges	18,502	27,451	34,648	12,470	137,858	230,930
Developer Contributions	610	610	610	610	3,760	6,200
Gas Tax	45,100	40,483	39,710	40,943	201,473	367,709
Recoveries	100	100	5,443	100	600	6,343
Subsidies and Senior Govt. Level Grants	3,858	2,538	0	1,100	293	7,790
Total	81,762	82,742	100,534	78,606	688,092	1,031,735

Note: Numbers may not balance due to rounding. Numbers are gross.

Proposed 2022 Capital Budget Detail

The following tables provide a detailed listing of proposed capital projects for 2022.

Program: Active Transportation

Project Number	Project Name	Gross Cost (\$000s)	Recovery (\$000s)	Net (\$000s)	Funding Source
TWCP07768	Cycling Program (Structures)	1,000	0	1,000	Development Charges
TWOE00206	Sidewalks	625	0	625	Development Charges
TWOE00359	Cycling Program	250	0	250	Gas Tax
TWOE009465	Cycling Program - Scenario C	20	0	20	Tax Capital
TWOE009504	Cycling Program (Parking)	100	0	100	Gas Tax,Tax Capital
TWOE06841	Cycling Program (Structures)	250	0	250	Development Charges
TWOE06861	Cycling Program (Parking)	50	0	50	Gas Tax
TWOE06871	Cycling Program	1,000	0	1,000	Development Charges
TWOE06995	Cycling Program - Scenario C	1,700	0	1,700	Gas Tax
TWOE08266	Cycle tracks - ICIP	1,900	1,393	507	Tax Capital
TWSW08532	Sidewalks	2,475	0	2,475	Developer
					Contributions,Gas Tax
Total		9,370	1,393	7,977	

Note: Numbers may not balance due to rounding.

Program: Bridge & Structure Renewal

Project Number	Project Name	Gross Cost (\$000s)	Recovery (\$000s)	Net (\$000s)	Funding Source
TWBR07715	Bridge & Structure Renewal	6,600	0	6,600	Gas Tax,Tax Capital
TWBR07716	Bridge & Structure Renewal	300	0	300	Gas Tax
TWBR07717	Bridge & Structure Renewal	300	0	300	Gas Tax
Total		7,200	0	7,200	

Program: Major Road Construction

Project Number	Project Name	Gross Cost (\$000s)	Recovery (\$000s)	Net (\$000s)	Funding Source
TWMR000148	Courtneypark Drive East / Highway 410 Interchange	4,930	2,465	2,465	Development Charges
TWMR00080	Preliminary Engineering Studies	115	0	115	Development Charges
TWMR00118	The Exchange - Burnhamthorpe Road West to City Centre Drive	2,270	0	2,270	Development Charges
TWMR009422	Preliminary Engineering Studies	500	0	500	Development Charges
TWMR009428	Vision Zero Implementation	250	0	250	Tax Capital
TWMR07726	Downtown Mississauga Movement PlanUpdate	300	0	300	Development Charges
TWMR08001	Redmond Rd. Burnhamthorpe Rd. W. to Webb Dr.	508	0	508	Development Charges
TWOE00464	Square One Drive - Amacon Driveway to Rathburn Road	1,249	0	1,249	Development Charges
TWOE009420	Property Acquisition	2,000	0	2,000	Development Charges
TWOE06885	Corridor Transportation Master Plans	750	0	750	Development Charges
Total		12,872	2,465	10,407	

Note: Numbers may not balance due to rounding.

Program: Municipal Parking

Project Number	Project Name	Gross Cost (\$000s)	Recovery (\$000s)	Net (\$000s)	Funding Source
TWOE009415	Pay by Phone Mobile Parking App	73	0	73	Planning Act Reserve Funds
TWOE009416	Digital Parking Solution	447	0	447	Planning Act Reserve Funds
TWRR00443	Parking Lot Rehabilitation	100	0	100	Tax Capital
Total		620	0	620	

Program: Noise Wall Infrastructure

Project Number	Project Name	Gross Cost (\$000s)	Recovery (\$000s)	Net (\$000s)	Funding Source
TWMR009436	Noise Wall Upgrades	4,960	0	4,960	Development Charges,Gas Tax
TWNW07773	Noise Wall Upgrades	2,415	0	2,415	Development Charges,Tax Capital
TWNW07774	Noise Wall Upgrades	75	0	75	Development Charges,Tax Capital
TWOE00335	Noise Wall Replacement	125	0	125	Gas Tax
Total		7,575	0	7,575	

Note: Numbers may not balance due to rounding.

Program: Roadway Rehabilitation

Project Number	Project Name	Gross Cost (\$000s)	Recovery (\$000s)	Net (\$000s)	Funding Source
TWRA07730	Road Asphalt Crack Sealing	500	100	400	Tax Capital
TWRR00039	Roadway Infrastructure Review	200	0	200	Tax Capital
TWRR00047	Roadway Rehabilitation	15,570	0	15,570	Gas Tax
TWRR07762	Roadway Rehabilitation	14,100	0	14,100	Gas Tax
Total		30,370	100	30,270	

Program: Traffic Management

Project Number	Project Name	Gross Cost (\$000s)	Recovery (\$000s)	Net (\$000s)	Funding Source
TW008472	Transportation Data Study	100	0	100	Tax Capital
TWOE00173	Transit Signal Priority (TSP)	340	0	340	Development Charges
TWOE00209	Field Equipment Replacement - Traffic Controllers	190	0	190	Tax Capital
TWOE00210	Traffic Signal Equipment Enhancements	350	0	350	Development Charges
TWOE00212	Traffic Signals - New	1,070	0	1,070	Developer Contributions, Development Charges
TWOE00213	Traffic Signals - Rebuild	1,200	0	1,200	Gas Tax
TWOE00214	Traffic System and ITS	200	0	200	Development Charges
TWOE00276	Streetlighting	850	0	850	Tax Capital
TWOE00307	Fire Pre-Emption Equipment Replacement	1,500	0	1,500	Tax Capital
TWOE00397	Streetlighting	300	0	300	Tax Capital
TWOE00409	Traffic Calming Program	250	0	250	Gas Tax
TWOE00504	UPS installations as part of the HLRT construction	500	0	500	Tax Capital
TWOE006757	Streetlighting	1,000	0	1,000	Tax Capital
TWOE007603	Pedestrian Crossover Program	200	0	200	Tax Capital
TWOE008583	Streetlighting	850	0	850	Tax Capital
Total		8,900	0	8,900	

Program: Works Fleet and Equipment Management

Project Number	Project Name	Gross Cost (\$000s)	Recovery (\$000s)	Net (\$000s)	Funding Source
TWOE002823	New Vehicles & Equipment	195	0	195	Development Charges
TWOE002874	Roads Specialized Equipment and Tool Replacement	55	0	55	Tax Capital
TWOE002881	Vehicle & Equipment Replacement	3,000	0	3,000	Tax Capital
TWOE007628	Specialized Equipment	30	0	30	Tax Capital
TWOE007669	Winter Maintenance Vehicles	150	0	150	Development Charges
TWOE008390	Infor Mobile for WOM	322	0	322	Tax Capital
TWOE009378	Online Personal and Project Diaries for Technical Service Staff	173	0	173	Tax Capital
TWOE009412	Infor - Inventory Module	379	0	379	Tax Capital
TWOE009551	Specialized Survey Equipment	150	0	150	Tax Capital
Total		4,455	0	4,455	

Note: Numbers may not balance due to rounding.

Program: Works Improvement

Project Number	Project Name	Gross Cost (\$000s)	Recovery (\$000s)	Net (\$000s)	Funding Source
TWOE009570	Works Yard General Improvements	400	0	400	Tax Capital
Total		400	0	400	

Proposed 2022-2031 Capital Budget by Sub-Program

The following tables provide a listing of capital needs by sub-program for 2022-2031.

Sub-Program	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Forecast (\$000s)	2026 Forecast (\$000s)	2027 Forecast (\$000s)	2028 Forecast (\$000s)	2029 Forecast (\$000s)	2030 Forecast (\$000s)	2031 Forecast (\$000s)	Total Forecast (\$000s)
Active Transportation											
ROADS Cycling Program	4,877	8,247	10,070	3,945	5,427	5,990	6,240	5,990	5,990	5,990	62,765
ROADS Sidewalks	3,100	3,100	5,100	2,628	3,100	3,100	3,100	3,100	3,100	3,100	32,528
Subtotal	7,977	11,347	15,170	6,573	8,527	9,090	9,340	9,090	9,090	9,090	95,293

Sub-Program	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Forecast (\$000s)	2026 Forecast (\$000s)	2027 Forecast (\$000s)	2028 Forecast (\$000s)	2029 Forecast (\$000s)	2030 Forecast (\$000s)	2031 Forecast (\$000s)	Total Forecast (\$000s)
Bridge & Structure Renewal											
ROADS Bridge & Structure Appraisal	0	300	0	300	0	300	0	300	0	300	1,500
ROADS Bridge & Structure Renewal	7,200	7,200	7,500	7,200	7,500	7,250	7,500	7,200	7,500	600	66,650
Subtotal	7,200	7,500	7,500	7,500	7,500	7,550	7,500	7,500	7,500	900	68,150

Sub-Program	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Forecast (\$000s)	2026 Forecast (\$000s)	2027 Forecast (\$000s)	2028 Forecast (\$000s)	2029 Forecast (\$000s)	2030 Forecast (\$000s)	2031 Forecast (\$000s)	Total Forecast (\$000s)
Environmental Management											
ROADS Environmental Mmgt-City Owned	0	188	188	375	375	375	375	375	375	375	3,000
Properties											
Subtotal	0	188	188	375	375	375	375	375	375	375	3,000

Sub-Program	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Forecast (\$000s)	2026 Forecast (\$000s)	2027 Forecast (\$000s)	2028 Forecast (\$000s)	2029 Forecast (\$000s)	2030 Forecast (\$000s)	2031 Forecast (\$000s)	Total Forecast (\$000s)
Major Road Construction											
ROADS Grade Separation	0	5,750	8,250	3,000	0	0	0	0	0	0	17,000
ROADS Intersection Improvements	0	500	1,200	1,250	1,550	500	500	0	469	0	5,969
ROADS Property Acquisition	2,000	500	1,500	0	8,896	4,154	3,856	1,434	0	0	22,340
ROADS Road Improvements	8,407	10,220	15,246	2,423	2,215	3,290	3,053	865	13,940	52,090	111,749
Subtotal	10,407	16,970	26,196	6,673	12,661	7,944	7,409	2,299	14,409	52,090	157,058

Sub-Program	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Forecast (\$000s)	2026 Forecast (\$000s)	2027 Forecast (\$000s)	2028 Forecast (\$000s)	2029 Forecast (\$000s)	2030 Forecast (\$000s)	2031 Forecast (\$000s)	Total Forecast (\$000s)
Municipal Parking											
ROADS Parking - Municipal	520	0	0	0	0	0	0	0	0	0	520
ROADS Parking Lot Rehab	100	100	100	100	100	100	100	100	100	100	1,000
Subtotal	620	100	100	100	100	100	100	100	100	100	1,520

Sub-Program	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Forecast (\$000s)	2026 Forecast (\$000s)	2027 Forecast (\$000s)	2028 Forecast (\$000s)	2029 Forecast (\$000s)	2030 Forecast (\$000s)	2031 Forecast (\$000s)	Total Forecast (\$000s)
Noise Wall Infrastructure											
ROADS Noise Wall Program	7,575	4,651	2,815	1,812	1,245	3,520	1,200	1,200	1,200	1,200	26,418
Subtotal	7,575	4,651	2,815	1,812	1,245	3,520	1,200	1,200	1,200	1,200	26,418

Sub-Program	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Forecast (\$000s)	2026 Forecast (\$000s)	2027 Forecast (\$000s)	2028 Forecast (\$000s)	2029 Forecast (\$000s)	2030 Forecast (\$000s)	2031 Forecast (\$000s)	Total Forecast (\$000s)
Roadway Rehabilitation											
ROADS Crack Sealing	400	400	400	400	400	400	400	400	400	400	4,000
ROADS Road Rehabilitation	29,670	25,904	30,176	42,472	45,000	57,740	70,021	69,249	86,191	84,188	540,611
ROADS Roadways Infrastructure Review	200	200	200	200	200	200	200	200	200	200	2,000
Subtotal	30,270	26,504	30,776	43,072	45,600	58,340	70,621	69,849	86,791	84,788	546,611

Sub-Program	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Forecast (\$000s)	2026 Forecast (\$000s)	2027 Forecast (\$000s)	2028 Forecast (\$000s)	2029 Forecast (\$000s)	2030 Forecast (\$000s)	2031 Forecast (\$000s)	Total Forecast (\$000s)
Traffic Management											
ROADS Road Safety	250	250	670	710	460	710	710	710	710	710	5,890
ROADS Signs & Markings	0	0	0	0	0	0	0	0	0	0	0
ROADS Street Lighting	3,000	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	23,250
ROADS Traffic Signals	5,650	5,900	5,050	3,550	3,550	3,550	3,550	3,550	3,550	3,550	41,450
Subtotal	8,900	8,400	7,970	6,510	6,260	6,510	6,510	6,510	6,510	6,510	70,590

Sub-Program	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Forecast (\$000s)	2026 Forecast (\$000s)	2027 Forecast (\$000s)	2028 Forecast (\$000s)	2029 Forecast (\$000s)	2030 Forecast (\$000s)	2031 Forecast (\$000s)	Total Forecast (\$000s)
Works Fleet and Equipment Management											
ROADS New Vehicles & Equipment	345	345	380	345	345	345	345	345	345	345	3,485
ROADS Specialized Equipment	1,110	559	155	155	155	155	155	155	155	155	2,908
ROADS Vehicle & Equipment Replacement	3,000	3,291	3,841	3,941	4,041	4,141	4,241	4,341	4,441	4,541	39,819
Subtotal	4,455	4,195	4,376	4,441	4,541	4,641	4,741	4,841	4,941	5,041	46,212

Sub-Program	2022 Proposed Budget (\$000s)	2023 Forecast (\$000s)	2024 Forecast (\$000s)	2025 Forecast (\$000s)	2026 Forecast (\$000s)	2027 Forecast (\$000s)	2028 Forecast (\$000s)	2029 Forecast (\$000s)	2030 Forecast (\$000s)	2031 Forecast (\$000s)	Total Forecast (\$000s)
Works Improvement											
ROADS Salt Management Program	0	250	0	0	0	0	0	0	0	0	250
ROADS Works Yard Storage Facilities	0	0	0	0	0	0	0	0	0	0	0
ROADS Works Yards Space	400	0	0	350	0	350	350	350	350	350	2,500
Subtotal	400	250	0	350	0	350	350	350	350	350	2,750
Total Expenditures	77,803	80,104	95,091	77,406	86,809	98,419	108,146	102,114	131,266	160,444	1,017,602

Note: Numbers may not balance due to rounding. Numbers are net.