



Roads, Storm Drainage & Watercourses 2013-2016 Business Plan

City of Mississauga, Ontario, Canada



THE CITY'S ROAD NETWORK IS **5,210** LANE KM LONG.
MISSISSAUGA RESIDENTS GENERATE OVER **1.1** MILLION
AUTOMOBILE TRIPS PER DAY.
OVER **45,000** STORM DRAINS AND **2,000** KM OF STORM SEWERS
CAPTURE RAINFALL THROUGHOUT THE CITY.

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Existing Core Services

1.0 Vision and Mission

Vision

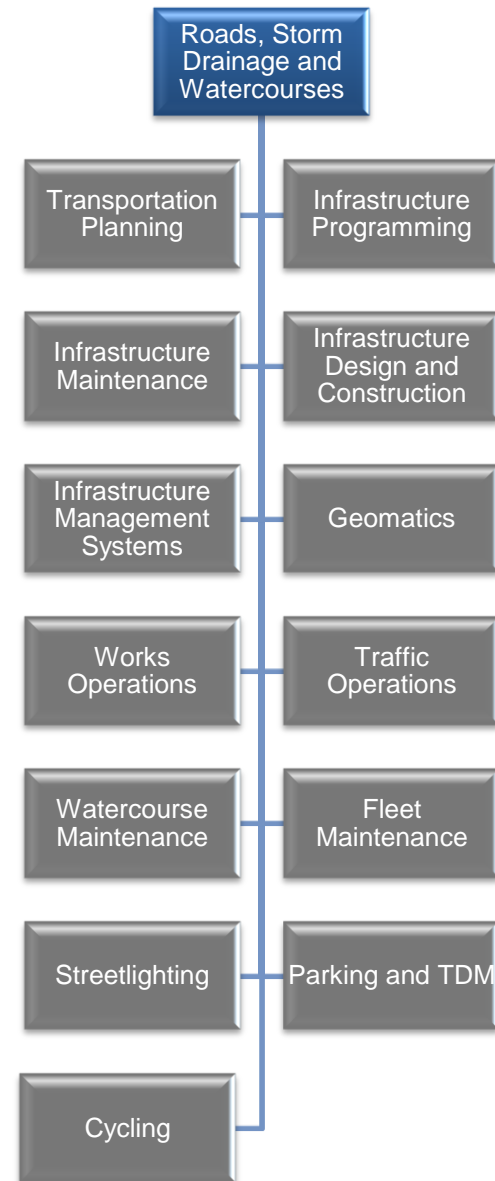
The vision for the Roads, Storm Drainage and Watercourses (RSDW) service area is to be a leader in delivering and managing safe and functional municipal transportation and storm water infrastructure.

Mission

The mission of the Roads, Storm Drainage and Watercourses service area is two-fold:

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

To plan, develop, construct and maintain a storm water management system which safeguards public and private infrastructure and property from erosion and flooding and enhances water quality.



2.0 Service Delivery Model

The RSDW service area operates out of the Transportation and Works Department and is responsible for the planning, construction, maintenance and overall management of Mississauga's roadways, bridges, sidewalks, storm water management systems and related assets. Infrastructure that is managed as part of this service also includes street lighting, municipal parking, noise barriers, watercourses, the cycling network, and the City's fleet of vehicles.

The management of infrastructure assets is accomplished through a number of operational activities including: infrastructure planning and programming, transportation planning, infrastructure design and construction, infrastructure maintenance and repair, geomatics, and public works operations such as winter maintenance, street sweeping, graffiti cleaning and litter pick up, traffic management and crossing guards.

This service area has a number of linkages and dependencies with other City service areas including Land Development Services, Legal Services, Business Services, Strategic Policy, Transit, and Recreation Services.



Work crews rehabilitating Duke of York Boulevard



Crack filling/sealing prevents water from entering the road base and is a cost effective way to maintain the pavement assets

3.0 Past Achievements

Some of this service area's recent accomplishments are listed below.

Awards and Recognition

- 2012 Bicycle Friendly Community Award – Bronze Designation from Share the Road Cycling;
- 2012 'Gold Level' Smart-Commute Workplace;
- 2011 Smart Commute Awards - Highest Smart Commute brand recognition among employers with greater than 500 employees;
- 2011 Ontario Public Works Association (OPWA) Bruce Brunton Award for National Public Works Week;
- 2011 Excellence in Storage Award from Salt Institute for the Malton, Clarkson, Meadowvale and Mavis District Works Yards;
- 2011 Canadian Institute of Planners Award for Planning Excellence in Transportation and Infrastructure for the Hurontario/Main Street Corridor Master Plan; and
- 2011 Friends of the Credit Conservation Award for municipal leadership in the integration of low impact development practices for the Elm Drive Project.

Recently Completed Projects and Initiatives

- The Lakeview Low Impact Development (LID) projects were completed for First and Third Street, including permeable pavers, rain gardens and educational signage. Low Impact Development (LID) is a stormwater management approach that seeks to mitigate the impacts of stormwater runoff and pollution. Site specific design and small scale stormwater practices are used to promote the use of natural systems for infiltration,

evapotranspiration, and reuse of rainwater. LID practices can effectively remove nutrients, pathogens and metals from stormwater, reducing the volume and intensity of stormwater flows;

- 85 roads (41 kilometres) were resurfaced, nine kilometres of new sidewalk were completed and seven bridge/culvert structures were rehabilitated;
- One kilometre of noise barriers were replaced along Central Parkway;
- 27 kilometres of cycling facilities installed;
- The Environmental Assessment (EA) for the Cooksville Creek Master Plan project was completed;
- 93 percent of the target City vehicles were converted to meet the City's Green Fleet Standard;
- A "Sidewalk Inspection and Deficiency Logging" application was implemented to meet the provincial minimum maintenance standards; and
- Introduced SNAP (Sustainable Neighbourhood Retrofit Action Plan) - a partnered approach to engage residents towards environmentally sustainable behaviour.



Construction workers completing the LID Project in the Lakeview Area

Source: Credit Valley Conservation Authority

4.0 Current Service Levels

This service area provides services to the residents and businesses within Mississauga and to all users of the City's transportation infrastructure. Key service levels include the following:

Average Road Network Condition: Maintain the road network at an average Overall Condition Index of 70, or "Good" rating;

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

Customer Service: Respond to all emergency related service requests as soon as practical; investigate all non-emergency service requests within three days and respond to them within ten days; process permit applications within three days and deliver other counter services and products;

Cycling: Implement the Cycling Master Plan (CMP);

Development Applications: Review and process all development applications in a timely manner with appropriate recommendations with respect to engineering matters;

Fleet Services: Ensure that vehicles and equipment are ready when required;

Geomatics: Collect and maintain geographic information and core data on City assets to support service expectations and critical business decision systems;

Infrastructure Programming: Develop appropriate ten year Capital Budget in accordance with lifecycle asset management practices and meet budget preparation and implementation timelines;

Long-range Planning and Policy Development: Develop and implement appropriate plans and strategies to guide decision making related to the city's transportation and storm water management infrastructure;

Minimum Maintenance Standards: Meet or exceed Provincial Minimum Maintenance Standards for the City's roadways and related assets;

Parking Infrastructure and Transportation Demand Management (TDM): Provision of parking and mobility management solutions;

Storm Sewer Network: Inspect and capture video of all storm sewers a minimum of every ten years;

Street Lighting: Maintain and ensure the operation of the street light network in accordance with established service response times;

Permits: Review and process permit applications in accordance with City standards;

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

Watercourses: Carry out full inspection a minimum of every five years and review identified "hot spots" annually; and

Winter: For an average winter storm, clear major arterial and collector roads within 12 hours after the end of the storm; clear residential roads, priority sidewalks and bus stops within 24 hours after the storm ends.

4.1 Maintaining our Infrastructure

The estimated replacement value of the City's road, storm drainage and related infrastructure is \$10.7 billion. The infrastructure managed by this service area includes:

- 5,210 lane kilometres of road network;
- 2,650 kilometres of sidewalks;
- 2,000 kilometres of storm sewer network including 200 kilometres of watercourses and 57 storm water management facilities;
- 49,234 street lights;
- 730 signalized intersections (511 under the City's jurisdiction);
- 223 bridges and culverts;
- 427 kilometres of bicycle lanes and boulevard multi-use trails;
- 244 on-road bikeways and trails;
- 56 kilometres of noise barriers; and
- 19 at-grade parking facilities, four below-grade parking facilities, 113 on-street pay and display machines within two on-street parking districts and 74 off-street pay and display machines.

Maintaining infrastructure in a state of good repair is one of the priorities of this service area. Staff provide recommendations to Council as to where and when to spend money on infrastructure maintenance, in order to maximize asset life cycle and minimize the funding required to do so. This is accomplished by applying sound asset management practices: inventorying what the city owns, conducting regular inspections, prioritizing work needs, preparing

appropriate ten year capital budgets and programs to address needs, and monitoring and reporting on projected asset condition. However, with the aging of the city's infrastructure, the capital maintenance requirements to maintain assets are increasingly difficult to fund. This infrastructure funding deficit remains one of the most important budget issues for the city.

Additional information about the city's plan to maintain infrastructure can be found within section 15.0 under the heading Explanation of Proposed Net Capital Program Budget.



The City has been monitoring rainfall since 1989 and now uses 14 wireless rainfall recording stations to keep track of rainfall intensity and duration throughout the city.

5.0 Opportunities and Challenges

Within the four year time frame of the 2013-2016 Business Plan, many factors will influence planning and service delivery for this service area. Addressing these factors is the focus of this business plan.

Mississauga continues to mature as a city. It is becoming increasingly urbanized, its infrastructure is getting older, and the demand for a more sophisticated, multi-modal transportation system and supporting traffic and maintenance operation is growing. There are also pressures to reconfigure the existing road network to advance place making objectives and address local traffic issues.

Higher order transit is underway on key corridors, including the construction of the transitway along the Highway 403/Eglinton Avenue corridor and preliminary planning and design work for the Hurontario/Main Light Rapid Transit (LRT) project.

Traffic congestion remains high on the public agenda. In the 2011 Environics Survey, traffic was identified as “the single most important local problem” in Mississauga. Growth in surrounding municipalities continues to put additional pressure on Mississauga’s road infrastructure. With limited funding available for the expansion of infrastructure, the City will be challenged to afford a capital program to match growth needs.

Suburban, greenfield design standards for road rights-of-way are changing where appropriate to those more suited for an urban environment. In addition, climate change and environmental accountability are key public policy concerns.

Implementation of the City’s *Parking Strategy* is underway, including a review of the needs and opportunities for downtown parking. There is continued emphasis on the management of parking demand through pricing.

The *Storm Water* financing study is nearing completion and recommendations will be pursued during the time frame of this business plan.

Although this business plan contains provisions for developing new infrastructure where needed, there continues to be a shift towards enhancing or retooling existing infrastructure to maximize the effectiveness of what we already have in place. Through the road and bridge capital programs, opportunities to include cycling, pedestrian and LID components are identified and integrated.

Over-arching themes for this service area continue to be public safety and the responsible maintenance of infrastructure to maintain a state of good repair.

6.0 Looking Ahead

Developing and managing a multi-modal transportation network and a storm water management network, responding to environmental issues and opportunities while deploying sound asset management and maintenance practices are the main goals of this plan. In respect of tight budgets and in accordance with best business practices, staff will continue to identify cost containment opportunities and implement ways to deliver the same service levels at reduced cost or increase service levels without increased budgets. This is an important ongoing element of business planning particularly for the big budget, on-street operational activities of this service area such as winter maintenance, road maintenance and city cleanliness.

The operational objectives of this service area over the next four years are highlighted below.

Management of Transportation and Storm Drainage Networks

- Undertake various transportation studies and continue to implement and assess Transportation Demand Management (TDM) measures such as paid parking and a multi-modal transportation network to maximize effectiveness of network and support City building;
- Implement the Traffic Management Centre within this business planning cycle, improving the City's ability to monitor and actively manage traffic;
- Complete the storm water financing study; and
- Explore partnership opportunities.



The Duke of York/Square One Drive Roundabout

Asset Management

- Maintain a state of good repair for critical infrastructure assets;
- Ensure asset management practices are followed and minimum maintenance standards are met; and
- Utilize a portion of the federal gas tax to fund bridge/culvert and major road rehabilitation.



New cycling facility along Camilla Road

Greening Our City

- Complete the implementation of energy efficient street lighting and monitor and report on cost savings;
- Increase resources for the management of environmental issues related to City property to assess and address risks associated with climate change and more stringent regulations;
- Continue with Smart Commute programs;
- Complete the Green Fleet program;
- Improve culverts and overland drainage systems to reduce flood risks and mitigate climate change impacts; and
- Utilize Automated Vehicle Technology to enhance salt management practices.

Continuous Improvement and Technology

- Implement new works facility to improve service delivery;
- Review winter and street lighting contracts for best practice and continuous improvement opportunities;
- Leverage existing computer technologies to improve business process and decision making; and
- Implement process improvements to maximize use of existing staff resources.



The Lakeview Low Impact Development (LID) project.
Source: Credit Valley Conservation Authority

7.0 Engaging our Customers

Citizens and stakeholders are engaged during decision making processes in a number of ways:

- Public meetings are held to inform and engage stakeholders with respect to projects affecting their community;
- The City's website offers significant information regarding public works operations, such as the status of snow clearing operations;
- Door flyers are used to inform residents of maintenance and construction works in their immediate area;
- National Public Works Week is celebrated every year by inviting residents and school children to participate in a number of events, including facility tours, equipment displays and a family fun day in the downtown; and
- Taxpayers are encouraged to contact the City about any concerns they have with respect to the city's services or the condition of infrastructure by calling 311.

The most recent public engagement survey in 2011 shows that 81 percent of residents of Mississauga are generally satisfied with today's level of service for the roads, traffic and environmental planning.



National Public Works Week Equipment Display



An employee from the City's Traffic Section explains how traffic signals work during Mississauga's Public Works Week festivities.

Required Resources

8.0 Human Resources

This service area will face a number of human resource challenges over the next four years. In order to address those challenges the following strategies will be implemented:

- Leverage corporate and service area programs on talent management, succession planning and staff development to address changing priorities and upcoming vacancies;
- Utilize organizational development resources to align resources, skills, processes and structures with service delivery priorities;
- Promote cross-departmental staff teams for project delivery; and
- Attract talented multi-disciplinary people.

Two new positions are being requested in 2013: an Environmental Engineer to support the environmental management of City properties and a Crossing Guard related to growth of the school crossing network.



The motto in the Transportation and Works Department is:
“Powered by our Employees, Focused on Safety,
Innovation and Excellence, We Deliver.”

Proposed Full Time Equivalent Staffing Distribution by Program

Program	2012	2013	2014	2015	2016
Maintenance Control	118.0	118.0	118.0	118.0	118.0
Engineering & Capital Works	60.6	60.6	60.6	60.6	60.6
Development Construction	12.0	12.0	12.0	12.0	12.0
Corporate Fleet Maintenance	27.7	27.7	27.7	27.7	27.7
Crossing Guards	68.8	69.8	69.8	69.8	69.8
Traffic Management	54.0	54.0	56.0	58.0	60.0
Transportation & Infrastructure Planning	42.1	43.1	43.1	44.1	45.1
Parking Facilities	2.0	2.0	2.0	2.0	2.0
Corporate Support Services Geomatics	32.0	32.0	32.0	32.0	32.0
Total Service Distribution	417.3	419.3	421.3	424.3	427.3

9.0 Technology

The successful implementation of technology is critical to the operational effectiveness of the Roads, Storm Drainage and Watercourses service area. This service area relies on a number of acquired enterprise systems to perform work and manage day to day transactions and processes.

The Hansen Enterprise system is used to track and process customer service requests, inventory infrastructure, manage work orders and issue permits. Bentley Micro-station is used to undertake computer aided design for transportation and storm drainage projects.

Specialized systems and software are also acquired and utilized for traffic, pavement and bridge management including capital and maintenance planning and network optimization. This service area is presently using Pave-Pro for pavement management, Bridge TMS for Bridge and Culvert Management and Fastracs T2000 for Traffic Management.

The four year business plan includes a number of initiatives to further improve decision making and effectiveness in day to day and strategic operations of this service area:

- Expand infrastructure system functionality to advance infrastructure asset management objectives and manage legislated standards for minimum maintenance;
- Leverage and expand Automated Vehicle Locator (AVL) and GPS technologies to mitigate risks and improve efficiencies;
- Upgrade and replace supporting equipment and networks;
- Develop and implement customer self-serve options for on-line business transactions and streamline various

business processes by managing these processes through an enterprise system;

- Implement a new Traffic Management Centre and complementary Intelligent Transportation Systems to provide the technology tools required to maximize existing roadway capacity and to ensure integration with future light rail transit and bus rapid transit (LRT/BRT) initiatives; and
- Implement a new communication system to accommodate traffic signal and integrated transportation system applications, as well as future wireless communication.



This service area inspected approximately 2,650 kilometres of sidewalk in 2012 using the *Sidewalk Inspection and Deficiency Logging* application. Over 7,900 deficiencies, ranging from trip hazards to damaged bays of sidewalk were identified. Steps were taken to make them safe.

10.0 Facilities

This service area operates out of six facilities:

- The Commissioner's Office, the Transportation and Infrastructure Planning Division and the Transportation Project Office and Business Services Division work out of offices at 201 City Centre Drive;
- The Customer Service Counter, Engineering and Works Division, Dispatch and the Infrastructure Management Systems Section work out of 3185 Mavis Road; and
- Four public works yards in the central area of Mississauga on Mavis Rd, and in Malton, Meadowvale and Clarkson.

A reconfiguration of the administrative building at 3185 Mavis Road will be required to house the new Traffic Management Centre.

The feasibility for the joint South-East Works yard and Community Services facility continues to advance at the Loreland Avenue site.

During the term of this business plan, the planning, design and property acquisition for the new North-Central Works facility and snow storage site will begin.



Arial view of the Mavis Public Works Facility at 3185 Mavis Road. The Administrative Building will undergo renovations to accommodate the New Traffic Management Centre.

Proposed Budget

This part of the Business plan sets out the financial resources required to deliver the proposed 2013-2016 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 prior year budget for 2012 was \$67,270,000 and the proposed budget for 2013 is \$69,105,000.

Total Changes to Maintain Current Service Levels

This service area works towards balancing uncontrollable cost pressures with finding efficiencies and cost savings throughout its operation. Overall, 40 percent of this service area's budget is outsourced - only 37 percent of the operating budget is attributed to labour. Significant components of major operating programs such as winter maintenance, road and sidewalk repairs and street cleaning are already outsourced: 66 percent, 77 percent and 53 percent respectively. Not only are opportunities for outsourcing leveraged in major program areas, but existing contracts are reviewed and opportunities explored to achieve more efficient and effective ways to deliver programs and services.

The impact of maintaining current service levels for the Roads, Storm Drainage and Watercourses service area is a \$1,792,000. This represents a 2.7 percent increase to the 2013 Operating Budget. 2013 budget pressures came from the following areas:

- Labour costs are projected to increase by \$895,000 and result from economic adjustments and changes to fringe benefits;

- Winter contract costs and materials are forecasted to increase by \$808,000;
- Other seasonal maintenance contract, fuel and some utility costs are forecasted to increase by \$1,122,000; and
- The 2012 gross operating costs were reduced by one percent and the savings were applied to the 2013 gross operating budget. The reductions included savings towards hydro costs for street lighting, parts for vehicles and equipment, tools, clothing allowances and building leasing costs for a total savings of \$1,028,000.

Total Changes to Operationalize Prior Decisions

There are no significant changes to report for this business planning cycle.

Total New Initiatives and Revenues

Three initiatives are proposed in the 2013 budget. They combine for a net increase of \$13,000 to the base operating budget. Below is a summary of each initiative. Additional details for each initiative can be found in Appendix 2 of this business plan.

1. Environmental Management for City property: \$102,000 net increase to the 2013 operating budget and a \$490,000 allocation from the 2013 capital budget.

The standard of care with respect to environmental issues associated with the purchase, management and disposal of City property continues to rise. Increasing awareness and new, stricter standards for clean-up and environmental reports recently enacted by the Ministry of Environment (MOE) have raised the bar for what constitutes due diligence for property owners. The City must demonstrate that it is

taking the correct steps towards the management of City-owned properties.

In addition to an enhanced level of environmental management of City-owned properties, additional resources will be required to ensure that proposed property acquisitions and disposals are environmentally assessed prior to closing, and to assist with environmental investigation issues related to City projects. The proposed operating budget includes an additional Environmental Engineer/Geoscientist beginning in 2013 along with resources to implement enhanced ground water monitoring. The proposed capital budget includes \$415,000 in 2013 to undertake seven Phase I and II Environmental Assessments and two risk assessments as well as \$75,000 for the development of a database and site management plans.

2. Proposed Changes to Downtown Parking: (\$102,000) net revenue increase to the operating budget.

The demand for on-street and off-street parking is expected to increase as a result of current and future high density developments in the downtown. Existing parking rates lag behind rates charged by the surrounding municipalities of Toronto, Oakville, Brampton, and Burlington. A common practice in municipal industry is to have premium pricing in high-demand and dense areas, such as a downtown.

This initiative proposes to increase the on-street parking rates from \$1 per hour to \$2 per hour, increase the off-street parking rates from \$1 per hour to \$1.5 and begin charging for parking in the evenings and weekends in the downtown parking garages. A change in the on-street parking rate from \$1 to \$2 per hour is estimated to generate an additional \$75,000 (\$100,000 annualized) in the gross revenue assuming an April 1, 2013 start date. A change in the

parking rate from \$1 to \$1.5 per hour in the Downtown parking garages is estimated to generate an additional \$37,500 (\$50,000 annualized) in gross revenue assuming an April 1, 2013 start date. Charging for parking in the evenings and weekends in the downtown parking garages is estimated to generate an additional \$90,000 (\$120,000 annualized) in revenue assuming an April 1, 2013 start date.

3. Customer Self Service for Permits: \$13,000 net increase to the operating budget and a \$145,000 allocation from the 2013 capital budget.

This initiative proposes to streamline two major permitting processes and implement customer self service on-line options. The existing Parking Enforcement System (PES) will be replaced with Hansen and Hansen's dynamic portal will be used to provide an on-line self service option for parking considerations and permits issued by the Transportation and Works Service Counter. This initiative will enable future on-line business transactions.

The proposed annual operating budget of \$13,000 in 2013 is to fund annual system maintenance. The proposed capital budget includes \$145,000 in 2013 to manage the project, acquire the necessary licenses and web services, develop, install and configure the application. The proposed \$20,000 capital budget in 2014 is for integration with an on-line service provider.

The following table separates the financial requirements into those required to maintain existing services; to operationalize prior decisions; and proposed new initiatives and revenues. The details on the changes to each category are provided in Sections 11 through 12.

Description (\$000's)	2013 Proposed Budget (\$000's)	2014 Forecast (\$000's)	2015 Forecast (\$000's)	2016 Forecast (\$000's)
Prior Year Budget	67,270	69,105	71,884	74,597
Increases/(Decreases) to Maintain Current Service Levels				
Labour and Benefits	895	1,475	1,506	1,025
Other Cost Increases	1,930	1,863	1,721	1,711
Efficiencies and Cost Savings	(1,028)	(759)	(759)	(759)
Current Revenue Changes	(5)	15	25	25
Total Changes to Maintain Current Service Levels	1,792	2,594	2,493	2,002
Increases/(Decreases) to Operationalize Prior Decisions				
Annualization of Previous Years Budget Decisions	0	0	0	0
Operating Impact of New Capital Projects	30	10	0	0
Total Changes to Operationalize Prior Decisions	30	10	0	0
Total Cost to Maintain Current Services Levels and Operationalize Prior Decisions	69,092	71,709	74,377	76,599
New Initiatives and New Revenues				
Total Proposed New Initiatives	115	208	220	203
Total Proposed New Revenues	(102)	(34)	0	0
Total New Initiatives and New Revenues	13	174	220	203
Proposed Budget	69,105	71,884	74,597	76,802

Note: Numbers may not balance due to rounding.

11.0 Changes to Maintain Current Service Levels and Operationalize Prior Decisions

The following two tables identify the major changes in the costs to maintain existing service levels and the costs increases arising from prior decisions. Detailed explanations of changes to 2013 can be found in Appendix 1.

Proposed Changes to Maintain Current Service Levels

Description (\$000's)	FTE	2013 Proposed Budget (\$000's)	2014 Forecast (\$000's)	2015 Forecast (\$000's)	2016 Forecast (\$000's)
Total Labour and Benefits	1.0	895	1,475	1,506	1,025
Other Cost Increases					
Contractor Others - Winter Program	0.0	628	657	688	719
Operating Materials - Winter Program	0.0	180	187	194	202
Contractor Others - Engineering and Works Programs (Excluding Winter Program)	0.0	773	541	244	248
Fuel Increase for Corporate Fleet Maintenance and Works Vehicles	0.0	302	181	181	181
201 City Centre Lease Increase	0.0	0	176	6	6
Hydro - Streetlighting	0.0	0	0	270	210
Other Changes	0.0	47	121	138	145
Total Other Cost Increases	0.0	1,930	1,863	1,721	1,711
Efficiencies and Cost Savings					
Hydro reduction related to the Streetlight LED Retrofit project	0.0	(460)	(759)	(759)	(759)
Reduction in Corporate Fleet Maintenance Parts Budget	0.0	(285)	0	0	0
Reduction in Works Tools and Clothing Allowance Budget	0.0	(55)	0	0	0
201 City Centre Lease Reduction	0.0	(160)	0	0	0
Other Changes	0.0	(68)	0	0	0
Total Efficiencies and Cost Savings	0.0	(1,028)	(759)	(759)	(759)
Current Revenue Changes					
Reduction in Development Revenue	0.0	25	25	25	25
Increase Parking Revenues expansion of on Street Parking Program	0.0	(30)	(10)	0	0
Total Current Revenue Changes	0.0	(5)	15	25	25
Total Changes to Maintain Current Service Levels	1.0	1,792	2,594	2,493	2,002

Note: Numbers may not balance due to rounding.

Proposed Changes to Operationalize Prior Decisions

Description (\$ 000's)	FTE	2013 Proposed Budget (\$000's)	2014 Forecast (\$000's)	2015 Forecast (\$000's)	2016 Forecast (\$000's)
Annualization of Prior Years Operating Cost Decisions					
N/A	0.0	0	0	0	0
Total Annualization of Prior Years Operating Cost Decisions	0.0	0	0	0	0
Operating Impact of New Capital Projects					
Expansion of on Street BIA Parking	0.0	30	10	0	0
Total Operating Impact of New Capital	0.0	30	10	0	0
Total Changes to Operationalize Prior Decisions	0.0	30	10	0	0

Note: Numbers may not balance due to rounding.

12.0 Proposed New Initiatives and New Revenues

The following table presents the costs by budget request for proposed new initiatives and proposed new revenues. Detailed descriptions of each budget request can be found in Appendix 2.

Proposed New Initiatives and New Revenues

Description (\$ 000's)	BR #	FTE	2013 Proposed Budget (\$000's)	2014 Forecast (\$000's)	2015 Forecast (\$000's)	2016 Forecast (\$000's)	2013 to 2016 Capital (\$000's)
New Initiatives							
Environmental Management of City Owned Properties	364	1.0	102	37	10	0	960
Customer Self Service - Permits	171	0.0	13	0	0	(50)	165
Traffic Management Centre	46	6.0	0	171	171	171	2,000
Cycling Master Plan Implementation Refresh	124	2.0	0	0	39	82	0
Total New Initiatives		9.0	115	208	220	203	3,125
New Revenues							
Downtown Paid Parking	64	0.0	(102)	(34)	0	0	0
Total New Revenues		0.0	(102)	(34)	0	0	0
Total Changes to New Initiatives and New Revenues		9.0	13	174	220	203	3,125

Note: Numbers may not balance due to rounding.

The following table sets out the proposed 2013 Budget and Forecasts for the remaining three years, by major expense and revenue categories.

Proposed Budget by Category

Description (\$000's)	2011 Actuals (\$000's)	2012 Budget (\$000's)	2013 Proposed Budget (\$000's)	2014 Forecast (\$000's)	2015 Forecast (\$000's)	2016 Forecast (\$000's)
Net Costs before Administrative and Support Costs						
Labour Costs	26,455	27,355	28,332	30,005	31,720	32,998
Other Operating Expenses	45,109	46,705	47,751	48,818	49,722	50,605
Total Revenues	(8,569)	(8,874)	(9,082)	(9,134)	(9,109)	(9,134)
Total Net Cost before Administrative and Support Costs	62,995	65,185	67,001	69,689	72,333	74,469
Administrative and Support Costs	2,044	2,085	2,104	2,194	2,262	2,332
Total Net Budget	65,039	67,270	69,105	71,883	74,596	76,801

Note: Numbers may not balance due to rounding.

The following table identifies the financial requirements for 2013 to 2016 by major program within the service area.

Proposed Budget by Program

Program Expenditures (\$000's)	2011 Actuals (\$000's)	2012 Budget (\$000's)	2013 Proposed Budget (\$000's)	2014 Forecast (\$000's)	2015 Forecast (\$000's)	2016 Forecast (\$000's)
Maintenance Control	7,154	6,087	9,860	10,238	10,619	10,958
Sewer Bridges & Watercourses	1,587	1,587	1,457	1,657	1,683	1,709
Winter Maintenance	20,558	20,391	20,570	21,416	22,298	23,220
Roads and Sidewalk Maintenance	5,558	5,046	4,011	4,111	4,214	4,319
Cleaning and Litter Pickup	3,384	4,248	3,322	3,357	3,382	3,407
Development Construction	1,097	1,131	1,155	1,199	1,248	1,298
Engineering & Capital Works	(655)	201	349	988	1,620	1,755
Corporate Fleet Maintenance	975	1,463	1,380	1,577	1,783	1,990
Transportation & Infrastructure Planning	3,634	4,474	4,575	4,896	5,172	5,486
Streetlighting	8,330	8,059	7,599	6,840	6,387	5,875
Crossing Guards	2,656	2,556	2,625	2,680	2,686	2,692
Traffic Management	7,998	8,967	9,210	9,754	10,187	10,624
Parking Facilities	(100)	(176)	(257)	(283)	(275)	(267)
Geomatics	2,863	3,237	3,250	3,454	3,593	3,735
Total Net Budget	65,039	67,270	69,105	71,883	74,596	76,801

Note: Numbers may not balance due to rounding.

13.0 Highlights of Proposed Capital Program Budget

Capital budget details for 2013 and 2014 can be found in Appendix 3A. Due to declining development charges, revenues and other financial pressures, the overall capital program for this service area has been reduced significantly from prior year's forecasts. While all priority projects are funded in 2013, a significant pressure to fund future key projects begins to occur in 2014. This underscores the need to continue the infrastructure levy.

The City's bridge and structure inventory remains the most critical of the City's assets to maintain from a safety perspective, and this business plan and capital forecast recommends increasing the average annual expenditures to reflect aging infrastructure and the average of \$60 million over the next ten years that will be required to maintain the City's structures in a state of good repair.

This business plan includes additional funding for the aging road network; however, the overall service level for the network will decline over the next 10 years.

Growth and lifecycle renewal has been slowed down as a result of limited funding for the following programs; cycling network expansion; sidewalk network expansion, traffic signal network expansion, noise barrier rehabilitation, street lighting renewal, and fleet lifecycle replacement.

14.0 Capital Program

This section summarizes the forecast ten year capital requirements for this service. The following table presents the forecast by major program. The next table summarizes the sources of financing for the capital forecast. A detailed listing of 2013 to 2016 projects is contained in Appendix 3A & 3B.

Proposed Capital Program

Program Expenditures (\$000's)	2013 Proposed Budget (\$000's)	2014 Forecast (\$000's)	2015 Forecast (\$000's)	2016 Forecast (\$000's)	2017 -2022 Forecast (\$000's)	Total 2013-2022 (\$000's)
Bridge & Structure Rehabilitation	3,500	5,500	5,500	5,500	40,000	60,000
Major Roads	3,045	8,655	5,995	11,655	10,348	39,698
Other Engineering	22,900	19,675	10,382	10,592	52,584	116,132
Roadway Rehabilitation	26,917	22,680	28,037	33,100	193,778	304,512
Storm Drainage	8,565	8,180	3,690	6,600	34,509	61,544
Total Expenditures	64,927	64,690	53,604	67,447	331,218	581,886

Note: Numbers may not balance due to rounding.

Program Funding (\$000's)	2013 Proposed Budget (\$000's)	2014 Forecast (\$000's)	2015 Forecast (\$000's)	2016 Forecast (\$000's)	2017 -2022 Forecast (\$000's)	Total 2013-2022 (\$000's)
Subsidies and Recoveries	0	0	0	0	0	0
Gas Tax	12,400	12,100	12,100	12,100	72,600	121,300
Cash In Lieu	460	160	350			970
Development Charges	7,133	18,565	13,419	24,092	65,337	128,545
Tax	14,775	31,676	27,025	30,544	191,462	295,482
Other	710	2,190	710	710	1,820	6,140
Debt	29,449	0	0	0	0	29,449
Total Funding	64,927	64,690	53,604	67,447	331,218	581,886

Note: Numbers may not balance due to rounding.

Performance Measures

15.0 Balanced Scorecard

A Balanced Scorecard identifies measures for four key areas for an organization's performance: Financial; Customers; Employees; and Business Processes.

By paying attention to all four areas an organization can retain balance to its performance and know that it is moving towards the attainment of its goals.

About the Measures for Roads, Storm Drainage and Watercourses:

Financial Measures

The average road and storm water maintenance operating costs are measures that indicate the City's ability to manage cost pressures associated with aging infrastructure and climate change respectively. Without compromising public safety, this service area will continue to apply best practices and find efficiencies in day to day operations while providing consistent service levels.

The average winter maintenance operating cost is a measure of the City's ability to balance winter maintenance operating costs with defined service levels. Without compromising public safety, this service area will continue to apply best practices and find operating efficiencies throughout all winter maintenance activities.

The annual gross revenue for parking is a measure of the City's ability to introduce new parking management initiatives and adjust parking rates. The City's objective is to implement improvements to parking management in strategic areas which is expected to increase parking revenues over the term of this business plan.

Customer Measures

The percentage of customer requests meeting target response dates is a measure that indicates the service area's ability to respond to resident and Council service requests in accordance with established response times and service levels.

Citizen satisfaction is a measure that indicates how satisfied residents are with road maintenance, traffic flow and environmental planning. The scale for this measure is from one to ten with ten being the highest level of satisfaction.

Employee Measures

Overall employee engagement is a measure which indicates the extent to which employees value, enjoy and believe in what they do. The employee engagement survey is conducted every two years.

Employee engagement survey participation is a measure indicating the percentage of employees participating in the Employee Engagement Survey. This statistic is measured every two years. It is important to the City that employees continue to participate in this survey and express how they feel about working at the City.

Employee engagement with professional and personal development is a measure which indicates employee's opportunities for personal and professional growth. This statistic is measured every two years as part of the Employee Engagement Survey.

Business Process Measures

The percentage of roads in “good” condition or better is a measure that indicates the City’s ability to manage lifecycle asset management programs for roads. A pavement condition survey is conducted every three years whereby a condition rating is applied to every city owned road in Mississauga.

The 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. A mandatory bridge and culvert condition survey is performed every two years whereby a condition rating is applied to every city owned bridge and culvert in Mississauga.

The percentage of City owned intersections that function at or above capacity is a measure that indicates the efficiency with which traffic moves through intersections within the City. While the percentage of intersections operating at or above capacity has not changed in recent years, the delay experienced by vehicles at these intersections has increased.

The number of collisions per thousand population is a measure that indicates the city’s ability to provide safe traffic management programs. This measure is very sensitive and will fluctuate from year to year.

The percentage of time that established winter maintenance response times are met is a measure that indicates the frequency with which the city meets its service level objectives for winter operations. The extent and severity of winter events will have an impact on this measure.



This service area is responsible for clearing snow from over 5200 lane km of roads each year as well as maintaining parking infrastructure, as seen below.



Measures for RSDW	2010 (Actual)	2011 (Actual)	2012 (Planned)	2013 (Planned)	2014 (Planned)	2015 (Planned)	2016 (Planned)
Financial:							
Average Road Maintenance Operating Cost Per Lane Km*	\$1,839	\$1,878	\$1,890	\$1,900	\$1,931	\$1,951	\$1,990
Average Storm Water Management Operating Cost per Km of Storm Sewer*	\$1,334	\$1,351	\$1,388	\$1,415	\$1,444	\$1,473	\$1,500
Average Winter Maintenance Operating Cost Per Lane Km*	\$3,196	\$3,772	\$3,264	\$3,330	\$3,400	\$3,465	\$3,534
Annual Gross Parking Revenues	\$345,977	\$691,641	\$891,000	\$900,000	\$1,157,000	tbd	tbd
Customer:							
Percentage of customer requests meeting target response date	94%	90%***	90%	90%	90%	90%	90%
Average citizen satisfaction rating for roads, storm drainage and watercourses	7.1	81%**	81%	80%	75%	75%	75%
Employee/Innovations and Learning Measures:							
Overall employee engagement for Transportation and Works	63%	63%	63%	65%	70%	70%	70%
Employee engagement survey participation for Transportation and Works	58%	58%	58%	58%	58%	60%	60%
Employee satisfaction professional and personal development for Transportation and Works	61%	61%	61%	65%	65%	67%	67%

Measures for RSDW	2010 (Actual)	2011 (Actual)	2012 (Planned)	2013 (Planned)	2014 (Planned)	2015 (Planned)	2016 (Planned)
Internal Business Process Measures:							
Percentage of Roads in Good Condition Or Better	77%	77%	74%	73%	72%	70%	69%
Percentage of Bridges in Good Condition Or Better	81%	81%	80%	80%	80%	80%	80%
Percentage of City owned intersections that function at or above capacity	14%	14%	15%	15%	15%	15%	15%
Number of Collisions per 1000 population	8	7	8	8	8	8	8
Percentage of Time that Winter Response Times Were Met	100%	100%	100%	100%	100%	100%	100%
Percentage of scheduled fleet converted to Green Fleet Standards	89%	93%	97%	100%	100%	100%	100%

* Note indicates that the MPMP Program Definitions were used.

** Note Indicates that the survey methodology for Citizen Satisfaction changed in 2011. This indicator is now measured as a percentage out of 100 instead of 10 response units.

*** Note indicates that the value was estimated.

Appendices

Appendix 1: Details of Changes to Maintain Current Service Levels and Operationalize Prior Decisions

Changes to Maintain Current Service Levels

Description (\$000's)	2012 Budget (\$000's)	2013 Proposed Budget (\$000's)	Change (\$000's)	Details
Labour and Benefits	27,355	28,250	895	Increase reflects negotiated union agreements, economic adjustment increases, labour adjustments and other fringe benefit changes
Other Cost Increases				
Contractor Others - Winter Program	14,295	14,923	628	Increase reflects growth and projected contract cost increases
Operating Materials - Winter Program	4,500	4,680	180	Cost increases for the purchase of pre-salt, salt and sand
Contractor Others - Engineering and Works Programs (Excluding Winter Program)	14,505	15,278	773	Increase reflects growth and projected contract cost increases
Fuel Increase for Corporate Fleet Maintenance and Works/Inspection/Survey Vehicles	1,854	2,156	302	Fuel increase of \$.10/litre
Other Changes	5,734	5,781	47	Other changes reflect budget increases to IT Maintenance allocation, Utilities and Business Support Allocation
Total Other Cost Increases	40,888	42,817	1,930	

Table continued on next page.

Continuation of **Appendix 1: Changes to Maintain Current Service Levels:**

Description (\$000's)	2012 Budget (\$000's)	2013 Proposed Budget (\$000's)	Change (\$000's)	Details
Efficiencies and Cost Savings				
Hydro reduction related to the Streetlighting LED Retrofit Project	5,676	5,216	(460)	The Streetlighting LED Retrofit is anticipated to commence in late 2012 and will be completed by late 2014, resulting in a significant reduction in energy costs in future years
Reduction in Corporate Fleet Maintenance Parts Budget	1,188	903	(285)	Cost savings is primarily based on small reduction in Transportation and Works portion of the Corporate Fleet and higher than normal replacement of vehicles, which reduced the volume/cost of parts for maintenance
Reduction in Works Tools and Clothing Allowance Budget	250	195	(55)	Budget reduced to reflect prior year expenditure level
201 City Centre Lease Reduction	389	229	(160)	To reflect adjustment in lease agreement for 2013
Other Changes	354	286	(68)	Budget reduction to various operating accounts within Transportation & Infrastructure Planning Division
Total Efficiencies and Cost Savings	7,857	6,829	(1,028)	
Current Revenue Changes				
Reduction in Development Revenue	(181)	(156)	25	To reflect the decrease in development activities
Increase Parking Revenues expansion of On Street Parking Program	(144)	(174)	(30)	Revenue increase related to the expansion of On Street Parking Program
Other Changes	(8,549)	(8,549)	0	
Total Current Revenue Changes	(8,874)	(8,879)	(5)	
Total Changes to Maintain Current Service Levels	67,225	69,016	1,792	

Note: Numbers may not balance due to rounding.

Changes to Operationalize Prior Decisions

Description (\$000's)	2012 Budget (\$000's)	2013 Proposed Budget (\$000's)	Change (\$000's)	Details
Annualization of Previous Years Operating Cost Decisions				
N/A	0	0	0	
Total Annualization of Previous Years Operating Cost Decisions	0	0	0	
Operating Impact of New Capital Projects				
Expansion of On Street BIA Parking	46	76	30	Operating cost increases related to the expansion of On Street paid parking in the BIA's
Total Operating Impact of New Capital Projects	46	76	30	
Total Changes to Operationalize Prior Decisions	46	76	30	
Total Cost to Maintain Current Services Levels and Operationalize Prior Decisions	67,270	69,092	1,822	

Note: Numbers may not balance due to rounding.

Appendix 2: Budget Requests

Proposed 2013-2016 New Initiatives and New Revenues (Budget Requests)

Please see the Budget Requests for the 2013-2016 Business Planning Cycle with details to follow.

Description	BR #	Year
New Initiatives		
Environmental Management of City Owned Properties	364	2013
Customer Self Service - Permits	171	2013
Traffic Management Centre	46	2014
Cycling Master Plan Implementation Refresh	124	2015
New Revenues		
Downtown Paid Parking	64	2013

Budget Request #: 364

Proposed Initiative

Environmental Management of City Owned Properties

Department

Transportation & Works Department

Service Area

Roads, Storm Drainage & Watercourses

Required Operating Investment

Impacts (\$000s)	2013	2014	2015	2016
Gross Expenditures	101.6	138.7	148.7	148.7
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	101.6	138.7	148.7	148.7
* Net Change in \$		37.2	10.0	0.0
FTEs	1.0	1.0	1.0	1.0

* Any net change that is negative, (in brackets), is a good thing. It means a reduction in expenditure or an increase in revenue.

Required Capital Investment

Impacts (\$000s)	2012 & Prior	2013	2014	2015	2016 & Beyond
Gross Expenditures	0.0	490.0	470.0	370.0	370.0
Non Tax Supported Funding Sources	0.0	0.0	0.0	0.0	0.0
Net Tax Supported Funding Required	0.0	490.0	470.0	370.0	370.0
FTEs		0.0	0.0	0.0	0.0

Why Staff Recommend this Initiative

The standard of care with respect to environmental issues associated with the purchase, management and disposal of City property continues to rise. Increasing awareness and new, stricter standards for clean-up and environmental reports recently enacted by the Ministry of Environment (MOE) have raised the bar for what constitutes due diligence for property owners. The City must continue to demonstrate, that it is taking the correct steps towards the management of City-owned properties.

Budget Request #: 364

Details of Service Change

The City must have a program in place to assess the environmental condition of its own properties and it must also have a process to ensure that properties with known environmental issues are properly managed going forward. This process must clearly identify roles and responsibilities both within City departments and with outside agencies including the Region of Peel and the MOE and includes; thorough documentation of management plans, monitoring and inspection activities, periodic reviews of the environmental status of these properties and annual reporting to City Leadership Team. In addition, a screening process will be developed to look at all City properties and identify those that require further investigation.

In addition to an enhanced level of environmental management of City-owned properties, additional resources will be required to ensure that proposed property acquisitions and disposals are environmentally assessed prior to closing, and to assist with environmental investigation issues related to City projects. The proposed operating budget includes an additional Environmental Engineer/Geoscientist beginning in 2013 along with resources to implement ground water monitoring. The proposed capital budget includes \$415,000 in 2013 to undertake seven Phase I and II Environmental Assessments and two risk assessments as well as \$75,000 for the development of a database and site management plans.

Service Impact

The proposed increased level of environmental services will provide a clear, documented process for the on-going environmental assessment and development and monitoring of management plans for City-owned properties. Implementation of the management plans will continue to be the responsibility of the appropriate City Department. This will allow the City to demonstrate that it is managing its properties in a responsible manner that is protective of human health and the environment.

Budget Request #: 171

Proposed Initiative

Customer Self Service - Permits

Department

Transportation & Works Department

Service Area

Roads, Storm Drainage & Watercourses

Required Operating Investment

Impacts (\$000s)	2013	2014	2015	2016
Gross Expenditures	13.0	13.0	13.0	13.0
Reserves & Reserve Funds	0.0	0.0	0.0	0.0
User Fees & Other Revenues	0.0	0.0	0.0	50.0
Tax Levy Requirements	13.0	13.0	13.0	(37.0)
* Net Change in \$		0.0	0.0	(50.0)
FTEs	0.0	0.0	0.0	0.0

** Any net change that is negative, (in brackets), is a good thing. It means a reduction in expenditure or an increase in revenue.*

Required Capital Investment

Impacts (\$000s)	2012 & Prior	2013	2014	2015	2016 & Beyond
Gross Expenditures	0.0	145.0	20.0	0.0	0.0
Non Tax Supported Funding Sources	0.0	0.0	0.0	0.0	0.0
Net Tax Supported Funding Required	0.0	145.0	20.0	0.0	0.0
FTEs		0.0	0.0	0.0	0.0

Why Staff Recommend this Initiative

In 2011, the City issued over 22,000 parking considerations via telephone inquiry. Customer service staff enters this information into two separate databases. This initiative proposes to eliminate one of the systems and lever the Hansen enterprise system to provide an on-line self-serve option for citizens; thus eliminating duplicate entry, streamlining business processes and freeing up staff time to absorb increased administrative and customer service demands in other areas.

Budget Request #: 171

Details of Service Change

This initiative proposes to streamline two major permitting processes and implement customer self service on-line options. The existing Parking Enforcement System (PES) will be replaced with Hansen and Hansen's dynamic portal will be used to provide an on-line self service option for parking considerations and permits issued by the Transportation and Works Service Counter. The 311 Call Centre is in the process of implementing a dynamic portal on e-City for self-serve service requests. This initiative will leverage this opportunity and pave the way for future on-line business transactions.

The proposed capital budget includes \$145,000 in 2013 to manage the project, acquire the necessary licenses and web services, develop, install and configure the application. The proposed capital budget in 2014 is for integration with an on-line service provider. The proposed annual operating budget of \$13,000 in 2013 is to fund annual system maintenance.

Service Impact

The proposed changes would benefit the City in the following areas:

1. It would provide customers with an easy way to request parking consideration or submit permit applications at all hours without the needing to talk to anyone or visit the customer service counter;
 2. Double data entry would be eliminated as only one enterprise system (Hansen) would be used, freeing up staff time to absorb increased administrative and customer service demands in other areas; and
 3. The tools developed as part of this initiative paves the way for the City to collect fees for future on-line transactions.
- A business case will be undertaken in 2012-2013 to confirm the expected benefits of leveraging the features in the Hansen 8 Enterprise system.

Budget Request #: 46

Proposed Initiative

Traffic Management Centre

Department

Transportation & Works Department

Service Area

Roads, Storm Drainage & Watercourses

Required Operating Investment

Impacts (\$000s)	2013	2014	2015	2016
Gross Expenditures	0.0	170.8	341.6	512.4
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	170.8	341.6	512.4
* Net Change in \$		170.8	170.8	170.8
FTEs	0.0	2.0	4.0	6.0

* Any net change that is negative, (in brackets), is a good thing. It means a reduction in expenditure or an increase in revenue.

Required Capital Investment

Impacts (\$000s)	2012 & Prior	2013	2014	2015	2016 & Beyond
Gross Expenditures	0.0	900.0	500.0	300.0	300.0
Non Tax Supported Funding Sources	0.0	562.5	312.5	187.5	187.5
Net Tax Supported Funding Required	0.0	337.5	187.5	112.5	112.5
FTEs		0.0	0.0	0.0	0.0

Why Staff Recommend this Initiative

A Traffic Management Centre (TMC) is needed to help accommodate the changing traffic needs of the City of Mississauga. The existing Traffic Control Centre is at the end of its life and the opportunity is available to replace it and incorporate new Intelligent Transportation System (ITS) applications to allow staff to proactively manage traffic. The TMC will help to maximize network efficiencies to respond to increased demand from motor vehicles, pedestrians, transit, and cycling.

Budget Request #: 46

Details of Service Change

The Traffic Management Centre (TMC) is the result of an incremental evolution of traffic control and technology efficiencies. Its components include a traffic signal communication upgrade, a new traffic signal control system, and Intelligent Transportation System (ITS) initiatives. Capital funding for these components have been approved and all projects are currently underway. Overall, the TMC and its associated projects will position the City to move away from predictive to proactive traffic management.

A capital investment of \$2 million phased over 4 years is required to establish and furnish the TMC:

2013: Design and construction of space-works - \$900,000

2014: Phase 1 - Initial hardware, software and furniture- \$500,000

2015: Phase 2 - Hardware and software expansion- \$300,000

2016: Phase 3 - Hardware and software expansion- \$300,000

New staff positions are required to support the TMC. The positions will be phased in as follows:

2014: 2 positions required to support regional traffic signal service delivery model

2015: 2 positions required for proactive traffic management and ITS initiatives

2016: 2 positions required for proactive traffic management and ITS initiatives

To complete the proactive traffic management and ITS initiatives, 2 positions will be required in 2017.

Proportional cost sharing with the Region of Peel and Ontario Ministry of Transportation remains to be determined for both the capital and operating investments.

Service Impact

The Traffic Management Centre will effectively change the City's control of traffic from a programmed passive control to an active and dynamic control (decisions and actions can be made ongoing and timely). Without this initiative, the service level for traffic operations will decrease significantly as higher traffic demands, transit priority and conflicting interests (i.e. cycling, accessibility, etc.) erode available road network capacity. Traffic delays and queuing will tend to be longer and complaints will increase.

Budget Request #: 124

Proposed Initiative

Cycling Master Plan Implementation Refresh

Department

Transportation & Works Department

Service Area

Roads, Storm Drainage & Watercourses

Required Operating Investment

Impacts (\$000s)	2013	2014	2015	2016
Gross Expenditures	0.0	0.0	38.7	121.2
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	38.7	121.2
* Net Change in \$		0.0	38.7	82.5
FTEs	0.0	0.0	1.0	2.0

* Any net change that is negative, (in brackets), is a good thing. It means a reduction in expenditure or an increase in revenue.

Required Capital Investment

Impacts (\$000s)	2012 & Prior	2013	2014	2015	2016 & Beyond
Gross Expenditures	0.0	0.0	0.0	0.0	0.0
Non Tax Supported Funding Sources	0.0	0.0	0.0	0.0	0.0
Net Tax Supported Funding Required	0.0	0.0	0.0	0.0	0.0
FTEs		0.0	0.0	0.0	0.0

Why Staff Recommend this Initiative

The Cycling Master Plan (CMP) is a critical element of the multi-modal transportation approach that is required to realize the City's long term urbanization objectives. Implementation of the CMP is led by the Cycling Office which was established through the conversion of one position and the addition of one new position. The need for two additional staff was identified in the CMP.

Budget Request #: 124

Details of Service Change

The Cycling Master Plan and Implementation Strategy includes 17 recommendations and 79 actions required to foster a culture where cycling is an everyday activity, build an integrated cycling network, and adopt a "safety-first" approach for cycling in Mississauga. Taken individually, implementation of each action is unlikely to have a major impact on how many people choose to cycle in Mississauga. Taken collectively, the recommendations and actions form a comprehensive program designed to support the development of a multi-modal transportation network and corresponding shift in transportation choices.

Over the first 2 years, the Cycling Office has focused on building the cycling network and working with partners such as the Mississauga Cycling Advisory Committee and Smart Commute to foster a cycling culture. The need for two additional staff has been identified in order to deliver on the remainder of the City's commitments within the plan. The new positions will be needed to focus on program monitoring and evaluation, network safety enhancements and education and awareness programs. In response to budget pressures, the new positions have been deferred, and it is proposed that they be phased-in over two years beginning in 2015.

Note: This budget request only addresses future operating pressures for cycling. The capital budget for cycling can be found within the capital budget section of the business plan.

Service Impact

Deferral of the additional staff recommended in the CMP will slow down the City's ability to deliver on the actions in the plan, particularly for network safety enhancements, monitoring and evaluation and education / awareness programs. Without new staff proposed for 2015-2016, the Cycling Office will be unable to adequately deliver on things like expansion of "cross-ride" intersection markings, retrofit of way-finding signage on existing routes, cycling counts and monitoring initiatives, and community outreach and education.

Building an average of 30 kilometres of new cycling facilities per year continues to be the program target for 2013-2016. However, without increased staff resources, meeting this target will not be sustainable in the years to come and would impact the City's ability to complete the network identified within the Master Plan within a time-frame of 20 years. Network additions should be balanced with other "soft" program elements of the Master Plan like cycling skills education and promotions in order to leverage the investment in cycling infrastructure and enable more residents to choose to cycle for their daily transportation needs.

Budget Request#: 64

Proposed Initiative

Downtown Paid Parking

Department

Transportation & Works Department

Service Area

Roads, Storm Drainage & Watercourses

Required Operating Investment

Impacts (\$000s)	2013	2014	2015	2016
Gross Expenditures	101.5	135.0	135.0	135.0
Reserves & Reserve Funds	0.0	0.0	0.0	0.0
User Fees & Other Revenues	203.0	270.0	270.0	270.0
Tax Levy Requirements	(101.5)	(135.0)	(135.0)	(135.0)
* Net Change in \$		(33.5)	0.0	0.0
FTEs	0.0	0.0	0.0	0.0

** Any net change that is negative, (in brackets), is a good thing. It means a reduction in expenditure or an increase in revenue.*

Required Capital Investment

Impacts (\$000s)	2012 & Prior	2013	2014	2015	2016 & Beyond
Gross Expenditures	0.0	0.0	0.0	0.0	0.0
Non Tax Supported Funding Sources	0.0	0.0	0.0	0.0	0.0
Net Tax Supported Funding Required	0.0	0.0	0.0	0.0	0.0
FTEs		0.0	0.0	0.0	0.0

Why Staff Recommend this Initiative

The demand for on-street and off-street parking is expected to increase as a result of current and future high density developments in the downtown. Existing parking rates lag behind rates charged by the surrounding municipalities of Toronto, Oakville, Brampton, and Burlington. A common practice in the municipal industry is to have premium pricing in high-demand and dense areas. such as a downtown.

Budget Request #: 64

Details of Service Change

This initiative proposes to increase the on-street parking rates from \$1 per hour to \$2 per hour, increase the off-street parking rates from \$1 per hour to \$1.5 and begin charging for parking in the evenings and weekends in the downtown parking garages.

A change in on-street parking rate from \$1 to \$2 per hour is estimated to generate an additional \$75,000 (\$100,000 annualized) in revenue assuming an April 1, 2013 start date. A change in parking rate from \$1 to \$1.5 per hour in the Downtown parking garages is estimated to generate an additional \$37,500 (\$50,000 annualized) in revenue assuming an April 1, 2013 start date. Charging for parking in the evenings and weekends in the downtown parking garages is estimated to generate an additional \$90,000 (\$120,000 annualized) in revenue assuming an April 1, 2013 start date.

Due to the proximity of Sheridan College's Hazel McCallion Campus (HMC) to the Main Street District and the aggressive timeline for development of the HMC Phase II and Near Campus it has become evident that the demand for parking supply in the downtown will only increase. With the implementation of the Paid Parking Program, the City is now in a better position to be able to manage limited convenient parking spaces by encouraging turnover of vehicles, which encourages alternate forms of transportation, including transit, cycling, and walking.

Service Impact

Paid parking was introduced to Mississauga in 2009. While the public has become accustomed to paying for parking in the downtown, there may be a negative reaction from residents, patrons and businesses upon initiation of the parking rate increase. Parking staff will need to be prepared to address questions and mitigate issues and concerns. The information provided below summarizes the rates for surrounding municipalities.

On-Street Parking Rates: City of Toronto: \$1.5 to \$3 per hour; City's of Brampton, Burlington and Oakville: \$1.5 per hour.

Off-Street Parking Rates: City of Brampton: \$1.5 per hour or \$8 daily rate; City of Oakville: \$1.5 per hour (daily rate ranges from \$5 to \$24); City of Burlington: \$1.5 per hour or \$12 daily rate; and City of Hamilton: \$1.5 per hour (daily rate ranges from \$4 to \$6).

In the Downtown, 50 percent of net revenue will be allocated to the Downtown Parking Reserve Fund for future parking infrastructure with the remaining 50 percent being used to off-set the municipal operating parking budget. Parking revenue estimates in this document are based on historical trends and are conservative.

Appendix 3A: Proposed 2013 Capital Program (\$000's)

Program: Bridge and Structure Rehabilitation

Project Number	Project Name	Gross Cost (000's)	Recovery (000's)	Net Cost (000's)	Funding Sources
13150	Bridge Repairs	120	0	120	Federal Gas Tax Reserve Fund
13151	Bridge Structure Detail Inspections & Design - Various Locations	300	0	300	Federal Gas Tax Reserve Fund
13152	Pedestrian Overpass Ogden Avenue to North Service Road	2,900	0	2,900	Federal Gas Tax Reserve Fund
13153	Mineola Road West over Mary Fix Creek	180	0	180	Federal Gas Tax Reserve Fund
Subtotal		3,500	0	3,500	

Program: Roadway Rehabilitation

Project Number	Project Name	Gross Cost (000's)	Recovery (000's)	Net Cost (000's)	Funding Sources
13100	Road Rehabilitation	26,817	0	26,817	Debt Financing/Federal Gas Tax Reserve Fund
13125	Crack Sealing	100	0	100	Roadway Infrastructure Maintenance Reserve Fund
Subtotal		26,917	0	26,917	

Program: Major Roads

Project Number	Project Name	Gross Cost (000's)	Recovery (000's)	Net Cost (000's)	Funding Sources
13101	Intersection Capital Program	495	0	495	City - Wide Engineering Development Charges Reserve Fund
13102	Development Charges - Study	200	0	200	City - Wide Engineering Development Charges Reserve Fund
13103	Preliminary Engineering Studies	100	0	100	City - Wide Engineering Development Charges Reserve Fund
13104	Square One Drive - Confederation Parkway to Rathburn Road West	250	0	250	Capital Reserve Fund
13106	Belgrave Drive Ramp Extension/Widening - Mavis Road to Cantay Road	100	0	100	City - Wide Engineering Development Charges Reserve Fund
13107	Mississauga Road Corridor Study	300	0	300	Capital Reserve Fund
13108	Belgrave Drive - MTO Amendment	200	0	200	City - Wide Engineering Development Charges Reserve Fund
13109	Dundas Street West/Ninth Line West - Phase 2	1,000	0	1,000	City - Wide Engineering Development Charges Reserve Fund
13110	Courtneypark Drive East Widening - Kennedy Road to Tomken Road	300	0	300	City - Wide Engineering Development Charges Reserve Fund
13111	Ninth Line/Milton-Mississauga Transportation Boundary Study	100	0	100	City - Wide Engineering Development Charges Reserve Fund
Subtotal		3,045	0	3,045	

Program: Other Engineering

Project Number	Project Name	Gross Cost (000's)	Recovery (000's)	Net Cost (000's)	Funding Sources
13160	Vehicle & Equipment Replacement	3,555	0	3,555	Main Fleet Vehicle and Equipment Replacement Reserve Fund
13161	Noise Wall Program	1,206	0	1,206	Capital Reserve Fund
13162	Customer Self Service Permits	145	0	145	Capital Reserve Fund
13165	Sidewalks	1,000	0	1,000	City - Wide Engineering Development Charges Reserve Fund
13166	Topographical Updating	45	0	45	Capital Reserve Fund
13167	Cycling Program	1,870	0	1,870	City - Wide Engineering Development Charges Reserve Fund/Federal Gas Tax Reserve Fund
13168	Site Assessments and Data Management	490	0	490	Capital Reserve Fund
13170	Field Equipment Replacement-Traffic Controllers	190	0	190	Capital Reserve Fund
13171	Traffic Signal Equipment Enhancements	155	0	155	City - Wide Engineering Development Charges Reserve Fund
13172	LED Streetlighting Retrofit Project -Phase 2 of 3	7,000	0	7,000	Debt Financing
13173	Traffic System and Intelligent Transportation System (ITS)	100	0	100	City - Wide Engineering Development Charges Reserve Fund
13175	Traffic Management Centre - Phase 1 of 4	900	0	900	City - Wide Engineering Development Charges Reserve Fund/Capital Reserve Fund
13194	Salt Management Program	50	0	50	Capital Reserve Fund
13195	Streetlighting	1,417	0	1,417	Capital Reserve Fund

Table continued on next page.

Continued **Program: Other Engineering**

Project Number	Project Name	Gross Cost (000's)	Recovery (000's)	Net Cost (000's)	Funding Sources
13197	Property Acquisition	2,750	0	2,750	Capital Reserve Fund
13198	Traffic Signals	1,567	0	1,567	City - Wide Engineering Development Charges Reserve Fund/Roadway Infrastructure Maintenance Reserve Fund/Contributions Reserve Fund - Traffic Signals
13199	New Parking Facility - Streetsville	300	0	300	Cash-in-lieu of Parking Reserve Fund - Streetsville
13200	Pay & Display Parking Meters-City Centre & Lakeshore	160	0	160	Cash-in-lieu of Parking Reserve Fund - City Centre/Port Credit
Subtotal		22,900	0	22,900	

Program: Storm Drainage

Project Number	Project Name	Gross Cost (000's)	Recovery (000's)	Net Cost (000's)	Funding Sources
13130	Storm Sewer Oversizing - Various Locations	200	0	200	Storm Water Management Development Charges Reserve Fund
13131	Sawmill Creek Erosion Control - Burnhamthorpe Road West to Swallowdale Court	780	0	780	Storm Water Management Development Charges Reserve Fund/Capital Reserve Fund
13132	Sawmill Creek Erosion Control - Erin Mills Parkway to Burnhamthorpe Road West	980	0	980	Storm Water Management Development Charges Reserve Fund/Capital Reserve Fund
13133	Applewood Creek Erosion Control - Behind Dixie Outlet Mall	290	0	290	Storm Water Management Development Charges Reserve Fund/Capital Reserve Fund

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Continued **Program: Storm Drainage:**

Project Number	Project Name	Gross Cost (000's)	Recovery (000's)	Net Cost (000's)	Funding Sources
13134	Monitoring and Minor Modification of Storm Water Management Facilities - Various Locations	80	0	80	Storm Water Management Development Charges Reserve Fund
13135	Loyalist Creek Erosion Control - Upstream of Thorn Lodge Drive	90	0	90	Storm Water Management Development Charges Reserve Fund/Capital Reserve Fund
13136	Sawmill Creek Erosion Control - Swallowdale Court to The Collegeway	1,170	0	1,170	Storm Water Management Development Charges Reserve Fund/Debt Financing
13137	Drainage Improvements - Various Locations	100	0	100	Contributions Reserve Fund - Drainage
13138	Development Charges Update	80	0	80	Storm Water Management Development Charges Reserve Fund
13139	Storm Water Management Pond Dredging and Rehabilitation - Pre-Engineering	50	0	50	Capital Reserve Fund
13140	Cooksville Creek Erosion Control - Rathburn Road East to Absolute Avenue	3,320	0	3,320	Storm Water Management Development Charges Reserve Fund/Debt Financing
13145	Minor Erosion Control Works - Various Locations	80	0	80	Storm Water Management Development Charges Reserve Fund/Capital Reserve Fund
13147	Sheridan Creek Erosion Control-Clarkson Road to Meadow Wood Road	1,345	0	1,345	Storm Water Management Development Charges Reserve Fund/Capital Reserve Fund
Subtotal		8,565	0	8,565	
Total Expenditure		64,927	0	64,927	

Appendix 3B: Proposed 2014-2016 Capital Program (\$000's)

Program: Bridge & Structure

Sub-Program	2014 Forecast (\$000's)	2015 Forecast (\$000's)	2016 Forecast (\$000's)
Bridge & Structure Rehabilitation	1,900	4,780	0
Bridge Repairs	3,300	420	5,200
Bridge and Culvert Appraisal & Improvement Priority	0	0	0
Inspection & Design	300	300	300
Subtotal	5,500	5,500	5,500

Program: Roadway Rehabilitation

Sub-Program	2014 Forecast (\$000's)	2015 Forecast (\$000's)	2016 Forecast (\$000's)
Crack Sealing	100	100	100
Parking Lot Rehabilitation	0	0	0
Roadway Infrastructure Review	0	750	0
Road Rehabilitation	22,580	27,187	33,000
Subtotal	22,680	28,037	33,100

Program: Major Roads

Sub-Program	2014 Forecast (\$000's)	2015 Forecast (\$000's)	2016 Forecast (\$000's)
Grade Separation	2,000	5,400	5,700
Intersection Improvements	495	495	495
Road Improvements	6,160	100	5,460
Subtotal	8,655	5,995	11,655

Program: Other Engineering

Sub-Program	2014 Forecast (\$000's)	2015 Forecast (\$000's)	2016 Forecast (\$000's)
Noise Wall Program	1,263	373	0
Parking - Municipal	160	350	0
Property Acquisition	2,030	3,310	5,180
Salt Management Program	50	50	50
Sidewalks	1,000	500	500
Specialized Equipment	20	0	0
Streetlighting	10,000	1,417	0
Survey Equipment and Control	25	25	25
Topographical Updating	145	45	45
Traffic Signals	2,512	2,312	2,792
Cycling Program	2,000	2,000	2,000
Environmental Management-City Owned Properties	470	0	0
Subtotal	19,675	10,382	10,592

Program: Storm Drainage

Sub-Program	2014 Forecast (\$000's)	2015 Forecast (\$000's)	2016 Forecast (\$000's)
Channelization	0	0	0
Culvert Improvement	750	0	0
Drainage	260	260	260
Erosion Control	490	700	2,620
Flood Relief	0	0	0
Storm Sewer	0	1,750	0
Storm Sewer Oversizing	200	200	200
Study	0	250	250
Storm Water Management (SWM) Facilities	6,480	530	3,270
Subtotal	8,180	3,690	6,600
Total Expenditures	64,690	53,604	67,447