



Roads, Storm Drainage and Watercourses - Table of Contents

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City of Mississauga

Roads, Storm Drainage & Watercourses Business Plan 2009-2010



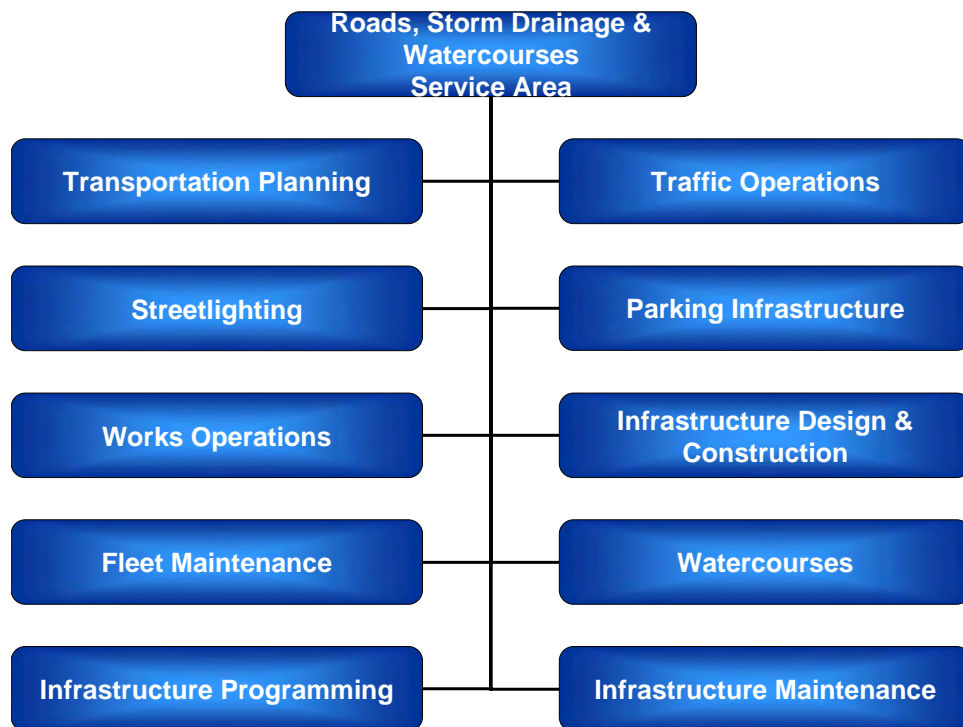
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Who We Are

The Roads, Storm Drainage and Watercourses Service Area is responsible for the planning, construction, maintenance and overall management of Mississauga's roadways, bridges, storm water management systems and related assets, including public works operations and traffic management. This service has a number of linkages to other Service Areas including Land Development, Transit and Recreation & Parks.



This area also encompasses City fleet management, long range transportation planning and various environmental services such as flood and spill control and watercourse erosion protection. These responsibilities are carried out by two divisions within the Transportation and Works Department: the Engineering and Works Division and the Transportation and Infrastructure Planning Division.

The **Engineering and Works Division** includes eleven programs which include a variety of design, construction, maintenance and operational activities including:

- Road and Sidewalk Maintenance
- Cleaning & Litter Pickup
- Winter Maintenance
- Sewer, Bridge & Watercourse Maintenance
- Corporate Fleet Maintenance
- Streetlighting
- Crossing Guards
- Traffic Management
- Design & Construction
- Development Services
- Maintenance Control

The activities related to this Service Area which are the responsibility of the **Transportation and Infrastructure Planning Division** include:

- Infrastructure asset management for storm drainage, roads and roadway-related assets
- Administration of the City's environmental standards
- Planning of the capital construction program
- Development and monitoring of medium and long range transportation plans and strategies

Our Mission

- To plan and develop a transportation system which efficiently and safely moves people and goods, supports the development of Mississauga as a 21st Century city and which services the municipality's social, economic and physical needs
- To oversee the construction of the City's roads, roadway-related assets including sidewalks, bridges and storm water facilities and maintain them in an efficient and acceptable state, having regard for public safety and asset life cycle
- To safeguard public and private infrastructure and property from erosion and flooding

Our Guiding Principles

- Provide services that respect the environment, community and fiscal position of the City and which drive and support the City's strategic goals
- Be customer-focused by delivering services in an efficient and effective manner, by having customer-centred business processes and by adhering to established service levels
- Be environmentally responsible by taking a lead role in the attainment of City environmental goals with respect to clean air, soil and water
- Recognize and develop employees and create an empowered employee culture to meet current and future challenges

Ongoing Operating Activities

Programs Delivered

Transportation Planning



- Develop and monitor long range transportation plans and strategies
- Develop and maintain the City's travel demand forecasting model
- Undertake studies for major transit facilities

Traffic Operations



- Manage Central Traffic Signal System
- Plan and implement by-law restrictions and pavement markings
- Fabricate and install traffic related signs
- Provide crossing guard protection
- Collect and manage traffic data
- Provide special event traffic planning

Streetlighting



- Recommend streetlighting policy
- Administer streetlighting contracts
- Provide night-time patrols for streetlights

Parking Infrastructure



- Plan, construct and maintain municipal parking facilities
- Manage parking

Works Operations



- Deliver winter maintenance, leaf pick-up, graffiti removal, litter pick-up and street sweeping programs

Infrastructure Design and Construction



- Administer the design and construction of infrastructure-related projects

Infrastructure Planning and Programming

- Monitor the condition of City owned assets having regard for the life cycle of roads, bridges, storm sewer facilities and sidewalks
- Develop construction and maintenance programs for roads, the storm drainage system, watercourses and road-related assets including bridges, sidewalks and noise walls

Infrastructure Maintenance



- Maintain roads, road-related assets, the storm drainage system and engineered components of watercourses

Business Plan Goals

This document presents the first formal Roads, Storm Drainage & Watercourses Business Plan and highlights the Service Area's contribution to City-wide service and strategic priorities as well as other Service Area priorities to be pursued in 2009-2010.

2009-10 Business Plan Parameters

The 2009-2010 Business Plan will focus on the following:

- State of Good Repair for Infrastructure
- Moving People and Goods – Supporting transit and a multi-modal transportation network to relieve congestion
- Service Delivery – Maintaining service levels and leveraging opportunities for continuous improvement in operations
- Environmental Stewardship – Positioning to reflect Mississauga's urbanization, climate change and an increasing public interest in environmental protection
- 21st Century City – Rethinking and updating policies and standards, integrating infrastructure and land use strategies and taking advantage of technology such as Intelligent Transportation Systems to further Mississauga's strategic goals

View to the Future

The upcoming City Strategic Plan and Official Plan Review studies, as well as the Metrolinx Regional Transportation Plan, will provide the framework for the next business plan cycle concerning initiatives related to city-building and transportation network planning. Mobility and multi-modal transportation systems are expected to be important themes, especially regarding transit and active transportation. Municipal parking management will be a key tool in future transportation demand management.

The replacement of the Central Traffic System will provide an opportunity to leverage technology to maximize the effectiveness of the existing transportation system.

Environmental sustainability will also be a major element in future planning, challenging us to alter standards and adding to cost pressures for service delivery and infrastructure design and construction.

A continued emphasis will be required on building a State of Good Repair for infrastructure and maintaining service levels, given aging infrastructure and a challenging economic environment.

Opportunities and Challenges

Challenges

Some of the major challenges facing this Service Area over the next two years are highlighted below:

External Factors	<ul style="list-style-type: none"> ■ Concern for environment ■ Aging infrastructure ■ Increased density and intensification – one size doesn't fit all ■ Competition for road space within the right-of-way ■ Gridlock/transportation issues ■ Climate change and effect on infrastructure ■ City Centre development ■ Multi-jurisdictional planning ■ Provincial Growth Plan and Metrolinx Regional Transportation Plan
Economic Factors	<ul style="list-style-type: none"> ■ Inflationary pressures especially on commodity prices ■ Mature City – declining development funding ■ Labour costs ■ Sustainability of funding from higher levels of government to support infrastructure renewal
Technology Factors	<ul style="list-style-type: none"> ■ Complexity of technology and speed of change; affordability of latest technology ■ Training and development ■ Focus on systems integration
Customer Factors	<ul style="list-style-type: none"> ■ Service expectations ■ Accessibility – Financial, Social, Physical ■ Increasing public engagement ■ Increasing knowledge and education ■ Aging population

Opportunities

Despite the challenges to this service, a number of opportunities exist that form the basis for the business plan initiatives being undertaken in 2009-2010:

- Broad strategic support from the community and other levels of government for increased mobility
- Concern for the environment support initiatives which focus on more sustainable service delivery options
- Increased opportunities to integrate multiple modes of transportation
- Technological advances for improved safety and efficiency of transportation systems
- Some additional government funding for transportation infrastructure

Summary of Our 2009-2010 Business Plan Initiatives

The Roads, Storm Drainage and Watercourses Business Plan contains initiatives that take into consideration the challenges and opportunities facing this service area and respond to the strategic guidelines set out for the 2009-10 plans, while maintaining the provision of core services.

The Business Plan needs to leverage the variety of opportunities that exist to progress the objectives of this Service Area.

Key among these is:

- Improved winter maintenance for sidewalks and bus stops during winter months. An additional \$700,000 in 2009 and \$1,300,000 in 2010 will improve service levels so that sidewalks and bus stops are cleared within 24 hours from the end of a winter storm.
- Support and funding for higher order transit and active transportation through the Metrolinx Regional Transportation Plan and Investment Strategy to be completed in the Fall of 2008
- Support, alignment and/or funding for other transportation improvements through other jurisdictions including the Ministry of Transportation Ontario
- Integrated land use and transportation design in City-building through development growth and intensification
- 2009 Development Charges Review Study
- Various planning studies such as the City's Strategic Plan, Official Plan Review, Downtown 21 Master Plan, Storm Water Quality Management Study Update, Environmental Strategy and Cycling Strategy
- Potential partnerships with other public jurisdictions and private interests on infrastructure projects (eg. parking)
- Response to Public Sector Accounting Board (PSAB) requirements in a manner which enhances asset management capabilities
- Capital construction and rehabilitation program designs to reflect City strategic objectives
- Internal e3 Service Reviews (Effectiveness, Efficiency, Economy)

The following Business Plan initiatives reflect business and service opportunities to move forward over the next two years and are summarized in the Appendix

Strategic Theme	Related Business Plan Initiatives
Relieving Congestion	<ul style="list-style-type: none"> ■ Transportation Master Plan ■ Traffic Management Centre ■ Intelligent Transportation Systems (ITS) for traffic ■ Traffic Signal Communications Review ■ Integrated Road Safety Program (IRSP) ■ Gaps in Road Network Feasibility and EA Studies ■ Pay for Parking Implementation ■ City Centre – Burnhamthorpe Road ■ Clarkson Village Study Implementation
Greening the Environment	<ul style="list-style-type: none"> ■ Environmental Management of City-Owned Property ■ Salt Management Plan Initiatives ■ Mississauga Storm Water Quality Control Strategy Update ■ Street Cleanliness
State of Good Repair for Infrastructure	<ul style="list-style-type: none"> ■ Storm Drainage Network Modelling ■ Pavement Management Study ■ Road Right-of-Way Design Standards ■ Road Cut Restorations & Monitoring
Continuous Improvement and Tax Rate Management	<ul style="list-style-type: none"> ■ Automated Vehicle Locator ■ Streetlighting Review Implementation

In addition, there are a number of City projects that are not reflected in this Business Plan but which will involve significant staff time in 2009.

These include:

- Hurontario Street and Dundas Road Higher Order Transit
- Environmental Master Plan
- Official Plan Review
- Port Credit/Lakeview District Planning
- Cycling Strategy Implementation
- Downtown 21 Master Plan
- Green Development Standards
- Development Charges review
- Mobility Hubs Strategic planning
- Asset Management Planning
- Various City Centre Infrastructure projects



Accomplishments

Awards

- The City of Mississauga was awarded both the Ontario Public Works Association (OPWA) as well as the Canadian Public Works Association (CPWA) awards for our National Public Works Week program that took place from May 20-24, 2008.
- Mississauga, along with the other municipal partners in the Smart Commute Initiative, received the Federation of Canadian Municipalities 2008 FCM-CH2M Hill Sustainable Community Award (Transportation Category).
- Mississauga, along with the other municipal partners in the Smart Commute Initiative, received the Ontario Professional Planners Institute Excellence in Planning Award and the inaugural Healthy Communities Award.

Roads Related

- A new Municipal Access Agreement between the City and several telecommunication carriers will be in place by the end of 2008
- Completion and opening of Confederation Bridge over Highway 403
- Replacement of the bridge on Lakeshore Road over the Cooksville Creek
- Completion of Mavis Road widening to six lanes from Eglinton Avenue to Matheson Boulevard
- Completion of Caterpillar Road reconstruction
- Scheduled completion of \$16 million of road resurfacing various locations
- Installation of 16 additional traffic signal installations

Storm Sewer and Watercourse Related

- Completion of a Master Servicing Planning and Design Study for the proposed Mississauga Fire and Emergency Services Training Centre (MFESTC) associated with the storm drainage, storm water management, sanitary sewage, and municipal water supply needs of the proposed MFESTC
- Compiled asset inventories as part of the Public Sector Accounting Board (PSAB) reporting requirements
- Developing a comprehensive and standardized watercourse erosion monitoring program
- Preparing a long term maintenance and improvement program for the Osprey Marsh storm water management facility
- Responded to over 94 storm sewer discharge and spill complaints - a record number
- Exploring innovative approaches to storm water management as part of the update to the Mississauga Storm Water Quality Control Strategy

Key Performance Indicators

Performance Measure 1: Volume to Capacity Ratio

Objective: Provide an adequate transportation system

Volume to Capacity Ratio				
Description	Time	2006	2001	1998
Eastbound Arterials and Major Collector roadways	7:00-9:00	0.80	0.86	0.77
Westbound Arterials and Major Collector roadways	16:00-18:00	0.80	0.72	0.65
Eastbound Highways, Arterials and Major Collector roadways	7:00-9:00	0.81	0.89	0.83
Westbound Highways, Arterials and Major Collector roadways	16:00-18:00	0.74	0.87	0.79

Source: Credit River Cordon Count Data. Data Management Group at the Urban Transportation Research and Advancement Centre at the University of Toronto
In examining this information one must also take into account public transit ridership information within the area

Performance Measure 2: Collisions per 1000 Population

Objective: Provide a safe transportation system.

Collisions Per 1000 Population			
Year	2006	2005	2004
Collisions	8.7	8.4	9.0
Population	668,549	664,337	651,972

Source: City of Mississauga Collision Statistics

Performance Measure 3: Operating costs for paved (hard top) roads per lane kilometre.

Objective: Provide efficient maintenance of paved roads.

Paved Roads Operating Costs Per Lane Kilometre				
2007	2006	2005	2004	2003
\$2,128	\$1,687	\$1,527	\$1,528	\$1,509
5036 lane km	5036 lane km	5002 lane km	4994 lane km	4955 lane km

Source: 2007 City of Mississauga FIR Report
Operational activities include surface maintenance, crack sealing, surface sweeping, surface flushing, shoulder maintenance, patching (hot-mix, cold-mix, and spray), slurry, utility cut repairs, frost heave repairs and base repairs
Figures do not include hot mix patching greater than 150m, surface treatment, or hot mix overlay

Performance Measure 4: Percentage of paved lane kilometres where the condition is rated as good or better.

Objective: Provide pavement condition that meets municipal objectives.

Percentage of Paved Roads Where Condition is Good or Better				
2007	2006	2005	2004	2003
78.5%	78.5%	83.1%	84%	84%

Source: 2007 City of Mississauga FIR Report

Performance Measure 5: Operating costs for urban storm water management (collection, treatment, and disposal) per kilometre of drainage system

Objective: Provide an efficient urban storm water management program.

Operating Cost for Urban Storm Water Management				
2007	2006	2005	2004	2003
\$858	\$949	\$826	\$917	\$827

Source: 2007 City of Mississauga FIR Report

The storm drainage network was 2632 kilometres in 2007

The Storm Water Management Program includes activities to maintain storm sewers, storm water management facilities, ditches, channels, and watercourses

Performance Measure 6: Operating cost for winter maintenance of roadways per lane kilometre maintained in winter

Objective: Provide for efficient winter maintenance of roads.

Winter Maintenance Operation Cost per Kilometre of Roads				
2007	2006	2005	2004	2003
\$3,448	\$1,787	\$3,748	\$3,419	\$2,699

Source: 2007 City of Mississauga FIR Report

Number of snow events in 2007 was 34

Snow fall at Lester B. Pearson International Airport was 114.4 cm in 2007

Performance Measure 7: Percentage of winter events where the response met or exceeded locally determined municipal service levels for road maintenance.

Objective: Provide an appropriate response to winter storm events.

Winter Maintenance Percentage of Time Met Service Levels				
2007	2006	2005	2004	2003
100%	100%	100%	94%	94%

Source: 2007 City of Mississauga FIR Report



Appendix - Our 2009-2010 Business Plan Initiatives

Development of a Transportation Master Plan for Mississauga	
What will be accomplished:	<ul style="list-style-type: none"> ■ Development of a multi-modal transportation master plan for the City of Mississauga
When will it be accomplished:	<ul style="list-style-type: none"> ■ Project Initiation – Fall 2008 ■ Project Completion – Fall 2009
Major Milestones:	<ul style="list-style-type: none"> ■ Oct 1/08 to Nov 30/08 – Draft Policies and Schedules ■ Dec 1/08 to Feb 29/09 – Final Policies and Schedules ■ March 1/09 to June/09 – Development of TMP Implementation Strategies ■ June/09 to Oct/09 – Implementation Strategy Consultation and Final TMP Preparation ■ Nov 1/09 to Dec/09 – TMP Document Rollout
Who is Accountable:	<ul style="list-style-type: none"> ■ Director of Transportation and Infrastructure Planning
Who is Supporting:	
<ul style="list-style-type: none"> ■ Transportation and Works Department <ul style="list-style-type: none"> ▪ Transportation Planning <ul style="list-style-type: none"> ◆ Project Management ◆ Technical Analysis ▪ Mississauga Transit, Transportation Asset Management, Traffic Engineering & Operations <ul style="list-style-type: none"> ◆ Technical Review ◆ Implementation of various projects, programs ▪ Geomatics <ul style="list-style-type: none"> ◆ Mapping services ■ Planning and Building Department <ul style="list-style-type: none"> *Policy Planning <ul style="list-style-type: none"> *Review of policies to ensure compatibility with Official Plan land use, urban design and other related policies ■ Economic Development <ul style="list-style-type: none"> *Identification of opportunities for mobility hub locations ■ Community Services Department <ul style="list-style-type: none"> ▪ Planning and Heritage <ul style="list-style-type: none"> ◆ Review of policies to ensure coordination and integration with cycling and pedestrian trail network 	
External Support Agencies:	
Metrolinx	
Ontario Ministry of Transportation	
GO Transit	
City of Brampton	
Town of Oakville	
City of Toronto	
Toronto Transit Commission	
Region of Halton	



Development of a Transportation Master Plan for Mississauga

Measures of Success		Desired Service Level Metrics		
<ul style="list-style-type: none"> ■ Conformity with Metrolinx Regional Transportation Plan ■ Better integration and co-ordination with transportation plans of neighbouring municipalities and transportation agencies ■ Better co-ordination with official plan policies, land use plans and urban design guidelines 		New	Improved over Current	
		<ul style="list-style-type: none"> ■ Increased policy direction in transportation modes (public transit, cycling/ walking and goods movement) ■ Improved integration of transportation and land use 	<ul style="list-style-type: none"> ■ Targets to be developed through the study. 	
Required Investment		2009	2010	2011
No required investment	OPERATING			
	Expenses			
	Revenues (Specify Source)			
	Total OPERATING			
	CAPITAL			
	Tax			
	Growth Based			
	Other (Specify Source)			
	Total CAPITAL			
	FTE			
	Permanent			
	Part-Time			
	Total FTE			
	Dependencies:	n/a		
Risks:	<ul style="list-style-type: none"> ■ High internal workload may delay delivery of the final product. 			
Risk Management Strategy:	<ul style="list-style-type: none"> ■ May have to defer delivery of this project until Official Plan update and Metrolinx RTP are completed. 			
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Building a City for the 21st Century ■ Relieving Congestion 			



Traffic Management Centre

What will be accomplished:	<ul style="list-style-type: none"> ■ Transformation from a Traffic Control Centre (TCC) to a Traffic Management Centre (TMC) ■ the ability for staff to manage and to respond to real-time traffic situations ■ ability to integrate systems and share data with key stakeholders ■ A TMC will monitor and respond to traffic situations using the following traffic management initiatives: <ul style="list-style-type: none"> ▪ traffic management - uses technologies to monitor and control the flow of traffic ▪ incident management - involves incident prevention and incident response ▪ emergency management - using surveillance and detection tools ▪ traveller information management - involves disseminating information via messages on variable message board ▪ centre to centre co-ordination – having the ability to co-ordinate systems with neighbouring centres 	
When will it be accomplished:	<ul style="list-style-type: none"> ■ Traffic Control System (FASTRAC) - 2008 \$1.5 million has been earmarked for the upgrade of the Traffic Control System ■ Traffic Management Centre - 2013 \$2.0 million has been earmarked for establishing the TMC 	
Major Milestones:	n/a	
Who is Accountable:	<ul style="list-style-type: none"> ■ Director of Engineering and Works 	
Who is Supporting:		
<ul style="list-style-type: none"> ■ Transportation and Works Department <ul style="list-style-type: none"> ▪ Traffic Engineering & Operations ■ Information Technology 		
Measures of Success	Desired Service Level Metrics	
<ul style="list-style-type: none"> ■ Approach needed to help maintain existing road capacity service levels 	New	Improved over Current
	<ul style="list-style-type: none"> ■ To help maintain existing levels of service for road operations and to be environmentally responsible, traffic must be actively managed rather than controlled by rigid measures 	<ul style="list-style-type: none"> ■ Current system is basic, deemed to be “dumb” and not possible to manage or control for specific events i.e. Efficiencies cannot be realized



Traffic Management Centre

Required Investment		2009	2010	2011
Total Cost \$3.6 M \$1.5 M in 2008. \$100 K in 2011. \$2.0 M in 2013.	OPERATING			
	Expenses			
	Revenues (Specify Source)			
	Total OPERATING			
	CAPITAL			\$100,000
	Tax			
	Growth Based			
	Other (Specify Source)			
	Total CAPITAL			
	FTE			
	Permanent			
	Part-Time			
	Total FTE			9 in 2013
Dependencies:	<ul style="list-style-type: none"> ■ Traffic Signal Communications Review 			
Risks:	<ul style="list-style-type: none"> ■ Future traffic control will be compromised if this initiative does not move forward. 			
Risk Management Strategy:	n/a			
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Building a City for the 21st Century ■ Relieving Congestion 			



Intelligent Transportation Systems (ITS) for Traffic Management

What will be accomplished:	<ul style="list-style-type: none"> ■ Intelligent Transportation Systems (ITS) apply diverse technologies to transportation systems to make them safer, more efficient and more environmentally friendly. Technologies can include sensor and control technologies, communications, and computer informatics. ■ The Traffic Management ITS initiative includes the implementation of video cameras at strategic locations throughout the City. Secondary initiatives include data collection sensors (volume, speed, classification) and changeable message signs 				
When will it be accomplished:	■ A series of smaller components will be on-going				
Major Milestones:	■ Incremental improvements towards a Traffic Management Centre				
Who is Accountable:	■ Director of Engineering and Works				
Who is Supporting:					
<ul style="list-style-type: none"> ■ Transportation and Works Department <ul style="list-style-type: none"> ▪ Traffic Engineering & Operations ■ Information Technology 					
Measures of Success		Desired Service Level Metrics			
■ Safer and more efficient transportation systems		New	Improved over Current		
		n/a	n/a		
Required Investment		2009	2010	2011	
Allocation \$100 K/year	OPERATING				
	Expenses				
	Revenues (Specify Source)				
	Total OPERATING				
	<hr/>				
	CAPITAL				
	Tax				
	Growth Based				
	Other (Specify Source)				
	Total CAPITAL				
	<hr/>				
	FTE				
	Permanent				
	Part-Time				
Total FTE					



Intelligent Transportation Systems (ITS) for Traffic Management

Dependencies:	<ul style="list-style-type: none"> ■ There is an interdependency on the Traffic Signal Communication Review and the Traffic Management Centre
Risks:	<ul style="list-style-type: none"> ■ Use current practice and technologies for traffic signal timing and complaint response/diagnostics. It should be noted that this will have an increasing impact on service levels by limiting capacity gain from technology versus certain traffic volume gain.
Risk Management Strategy:	n/a
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Building a City for the 21st Century ■ Relieving Congestion



Traffic Signal Communication Review

What will be accomplished:	<ul style="list-style-type: none"> ■ To review and develop an alternative to Bell Canada dedicated lines (Bell Canada no longer wants to support their analog communication lines). Hence, a decision has to be made to either continue with the antiquated analog system or transfer all the existing Bell communication lines to either fibre optics or to wireless technology (or a combination). 			
When will it be accomplished:	<ul style="list-style-type: none"> ■ The Traffic Signal Section has approached the Information Technology Division (I.T.) to explore partnerships with other stakeholders to build a City-wide communication network in 2008 			
Major Milestones:	n/a			
Who is Accountable:	<ul style="list-style-type: none"> ■ Director of Engineering and Works and Director of Information Technology 			
Who is Supporting:				
<ul style="list-style-type: none"> ■ Transportation and Works Department <ul style="list-style-type: none"> ▪ Traffic Engineering & Operations ■ Information Technology 				
Measures of Success		Desired Service Level Metrics		
<ul style="list-style-type: none"> ■ More reliable, independent and less costly communication system. Increased capacity for multi users 		New	Improved over Current	
		n/a	n/a	
Required Investment		2009	2010	2011
\$1.6 M in 2008. \$800 K in 2007. \$800 K in 2008.	OPERATING			
	Expenses			
	Revenues (Specify Source)			
	Total OPERATING			
	CAPITAL			
	Tax			
	Growth Based			
	Other (Specify Source)			
	Total CAPITAL			
	FTE			
	Permanent			
	Part-Time			
	Total FTE			



Traffic Signal Communication Review

Dependencies:	<ul style="list-style-type: none"> ■ Traffic Control System and ITS initiative
Risks:	<ul style="list-style-type: none"> ■ If not done in a timely manner communication between traffic signals and central computer may be disabled. Doubtful if Bell Canada will continue to support existing system.
Risk Management Strategy:	n/a
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Building a City for the 21st Century ■ Relieving Congestion



Integrated Road Safety Program (IRSP)

What will be accomplished:	<ul style="list-style-type: none"> ■ Initial successes include a major pedestrian initiative, including enhanced pavement markings and signage, countdown timers and audible pedestrian signals ■ Subsequent efforts will be made to develop databases and analysis tools that will help to identify problem areas and prompt appropriate reviews (example: road safety audit). 	
When will it be accomplished:	<ul style="list-style-type: none"> ■ 2009 Database review ■ 2010 Database update approximation 	
Major Milestones:	n/a	
Who is Accountable:	<ul style="list-style-type: none"> ■ Director of Engineering and Works 	
Who is Supporting:		
<ul style="list-style-type: none"> ■ Transportation and Works Department <ul style="list-style-type: none"> ▪ Traffic Engineering & Operations <ul style="list-style-type: none"> ◆ Technical Review & Analysis ■ Information Technology ■ Safe Driving Committee (SDC) ■ Traffic Safety Council (TSC) ■ Mississauga Cycling Advisory Committee (MCAC) 		
Measures of Success	Desired Service Level Metrics	
<ul style="list-style-type: none"> ■ Improved safety (measured as reduction in future frequency and severity of road collisions) ■ Maximized capacity of City roadways and congestion mitigated ■ Improved communication and coordination of existing programs and initiatives implementation of identified pedestrian safety countermeasures 	New	Improved over Current
	n/a	n/a



Integrated Road Safety Program (IRSP)

Required Investment		2009	2010	2011
	OPERATING			
	Expenses			
	Revenues (Specify Source)			
	Total OPERATING			
	CAPITAL			
	Tax		\$200,000	
	Growth Based			
	Other (Specify Source)			
	Total CAPITAL		\$200,000	
	FTE			
	Permanent			
	Part-Time			
	Total FTE			
Dependencies:	n/a			
Risks:	<ul style="list-style-type: none"> ■ Increased responsibility to fix identified problems. 			
Risk Management Strategy:	<ul style="list-style-type: none"> ■ A proactive approach should meet or exceed industry standard. 			
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Building a City for the 21st Century 			



Gaps in Road Network – Feasibility and EA Studies

What will be accomplished:	<ul style="list-style-type: none"> ■ Studies will be undertaken to determine the feasibility of increasing traffic capacity within the current road network: specifically, widening Courtney Park Drive from Kennedy Road to Dixie Road to 6 through lanes, including the structure across Hwy. 410, and linking Britannia Road East with Burnside Court, under Hwy. 410. In addition, an addendum to the North-South Arterial Road (Creebank Road) Environmental Assessment Study is proposed to determine the requirements for constructing a new ramp from Hwy. 401 westbound west of the Etobicoke Creek, which would link with the Creebank Road extension at Enterprise Road 	
When will it be accomplished:	<ul style="list-style-type: none"> ■ Britannia Rd extension 2009 ■ Courtney Park Drive 2010 ■ Addendum 2009 	
Major Milestones:	n/a	
Who is Accountable:	<ul style="list-style-type: none"> ■ Director of Transportation and Infrastructure Planning 	
Who is Supporting:		
<ul style="list-style-type: none"> ■ Planning and Building D&D ■ Community Services Planning and Heritage ■ Transportation and Works – Engineering and Works ■ Mississauga Transit ■ Environmental Services 		
Measures of Success	Desired Service Level Metrics	
<ul style="list-style-type: none"> ■ Completion of studies 	New	Improved over Current
	n/a	n/a



Gaps in Road Network – Feasibility and EA Studies

Required Investment		2009	2010	2011	
Funding for Courtney Park EA.	OPERATING				
	Expenses				
	Revenues (Specify Source)				
	Total OPERATING				
	CAPITAL				
	Tax		\$40,000		
	Growth Based		\$160,000		
	Other (Specify Source)				
	Total CAPITAL		\$200,000		
	FTE				
	Permanent				
	Part-Time				
	Total FTE				
Dependencies:	<ul style="list-style-type: none"> ■ Partnership with MTO for all three studies and Region of Peel for the Ramp study 				
Risks:	n/a				
Risk Management Strategy:	n/a				
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Relieving Congestion 				



Pay for Parking : Parking Management and Operations

What will be accomplished:	<ul style="list-style-type: none"> ■ The initial installations (95) have been identified and approved by Council. It is envisioned that parking displacement and road/parking expansion will necessitate on-going expansion in response to changing parking demands/impacts. ■ The central system will allow for expansion of pay for parking on-street, in off-street parking lots, and in underground parking lots (alternate power source would be required). It will also allow for live credit card processing and credit cards with computer chips. Net revenues will help to maintain and develop new parking facilities 	
When will it be accomplished:	■ Currently finalizing the purchase of a central system and pay for parking machines	
Major Milestones:	n/a	
Who is Accountable:	■ Director of Engineering and Works	
Who is Supporting:		
<ul style="list-style-type: none"> ■ Transportation and Works Department <ul style="list-style-type: none"> ▪ Traffic Engineering & Operations ▪ Enforcement ■ Information Technology ■ Finance 		
Measures of Success	Desired Service Level Metrics	
■ On street parking implemented and used to manage parking will result in a revenue stream that currently does not exist	New	Improved over Current
	n/a	<ul style="list-style-type: none"> ■ There is currently minimal management of parking, especially in the City Centre Core area. The parking system will provide a tool to help regulate parking.



Pay for Parking : Parking Management and Operations

Required Investment		2009	2010	2011
Revenues are expected to cover all operating and capital costs.	OPERATING			
	Expenses			
	Revenues (Specify Source)			
	Total OPERATING			
	CAPITAL			
	Tax			
	Growth Based			
	Other (Specify Source)			
	Total CAPITAL			
	FTE			
	Permanent			
	Part-Time			
	Total FTE			
Dependencies:	■ Parking Strategy Study			
Risks:	■ Public dissatisfaction by having to pay for parking when it was free before:			
Risk Management Strategy:	n/a			
Contribution to the City's Strategic Priorities:	■ Building a City for the 21st Century			



Burnhamthorpe Road through City Centre

What will be accomplished:	<ul style="list-style-type: none"> ■ Will determine the future transportation and urban design needs of Burnhamthorpe Road between Mavis Road and Hurontario Street 			
When will it be accomplished:	<ul style="list-style-type: none"> ■ 2009 E.A. ■ 2010 design 			
Major Milestones:	<ul style="list-style-type: none"> ■ See above 			
Who is Accountable:	<ul style="list-style-type: none"> ■ Director of Transportation and Infrastructure Planning 			
Who is Supporting:				
<ul style="list-style-type: none"> ■ Transportation and Works – Mississauga Transit ■ Engineering and Works ■ Planning and Building D&D ■ Community Services Planning and Heritage 				
Measures of Success		Desired Service Level Metrics		
<ul style="list-style-type: none"> ■ Approved EA ■ A design that is consistent with the Downtown 21 Study, and desired City strategic direction 		New	Improved over Current	
		n/a	n/a	
Required Investment		2009	2010	2011
Total Investment \$6.5 M \$150 K in 2006. \$150 K in 2008. \$200 K in 2009. \$3.5 M in 2011. \$2.5 M in 2012.	OPERATING			
	Expenses			
	Revenues (Specify Source)			
	Total OPERATING			
	CAPITAL			
	Tax	\$20,000		\$3,500,000
	Growth Based	\$180,000		
	Other (Specify Source)			
	Total CAPITAL	\$200,000		\$3,500,000
	FTE			
	Permanent			
	Part-Time			
	Total FTE			



Burnhamthorpe Road through City Centre

Dependencies:	<ul style="list-style-type: none"> ■ Downtown 21 Master Plan and City Centre modelling
Risks:	<ul style="list-style-type: none"> ■ There may be conflicting viewpoints and objectives related to the design of the ROW and insufficient budget to accommodate major changes to the roadway (e.g. moving curbs)
Risk Management Strategy:	<ul style="list-style-type: none"> ■ Multi-disciplinary study team; analysis and costing of alternatives against strategic, technical and financial considerations
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Building a City for the 21st Century ■ Relieving Congestion



Clarkson Village Study Implementation

What will be accomplished:	<ul style="list-style-type: none"> ■ The plan entails a 25 year vision for the revitalization of Clarkson Village, proposing the implementation of bicycle lanes, a centre median on Lakeshore Road and revitalized boulevard works. The initial phase of the plan is the re-stripping of portions of Lakeshore Road to implement bicycle sharrows 			
When will it be accomplished:	<ul style="list-style-type: none"> ■ Proposed 2009 start up with changes to pavement markings to accommodate cycling sharrows ■ Long term 25 year vision for remainder of the plan 			
Major Milestones:	<ul style="list-style-type: none"> ■ 2009 pavement markings 			
Who is Accountable:	<ul style="list-style-type: none"> ■ Director of Transportation and Infrastructure Planning 			
Who is Supporting:				
<ul style="list-style-type: none"> ■ Transportation and Works ■ Engineering and Works 				
Measures of Success		Desired Service Level Metrics		
<ul style="list-style-type: none"> ■ Implementation of cycling sharrows in 2009 		New	Improved over Current	
		<ul style="list-style-type: none"> ■ Commence ment of an on road cycling facility on Lakeshore Road 	<ul style="list-style-type: none"> ■ No on-road cycling markings currently exist 	
Required Investment		2009	2010	2011
	OPERATING			
	Expenses			
	Revenues (Specify Source)			
	Total OPERATING			
	CAPITAL			
	Tax	\$100,000		
	Growth Based			
	Other (Specify Source)			
	Total CAPITAL	\$100,000		
	FTE			
	Permanent			
	Part-Time			
	Total FTE			



Clarkson Village Study Implementation

Dependencies:	<ul style="list-style-type: none"> ■ Running parallel with the Cycling Master Plan Update Study
Risks:	n/a
Risk Management Strategy:	n/a
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Building a City for the 21st Century ■ Relieving Congestion



Environmental Management of City-Owned Property

What will be accomplished:	<ul style="list-style-type: none"> ■ Gaps in the City’s environmental management of City-owned property will be addressed and environmental investigations for eleven remaining properties identified in T&W’s database will be completed 	
When will it be accomplished:	<ul style="list-style-type: none"> ■ 5-Year timeline to complete assessments 	
Major Milestones:	<ul style="list-style-type: none"> ■ Complete ‘benchmarking’ to identify the state of practice with respect to environmental management of corporate property in 2008 ■ Develop a Memorandum of Understanding (MOU) with other departments which outlines the roles and responsibilities of staff in the environmental management of City-owned properties in 2008 ■ Complete environmental investigations for remaining properties identified in T&W’s database from 2009 to 2013 	
Who is Accountable:	<ul style="list-style-type: none"> ■ Director of Transportation and Infrastructure Planning 	
Who is Supporting:		
<ul style="list-style-type: none"> ■ Land Development Services <ul style="list-style-type: none"> ▪ Land-use Policy ▪ Development Approval ■ Parks and Recreation <ul style="list-style-type: none"> ▪ Development of Green Space ■ Business Services & Corporate Assets <ul style="list-style-type: none"> ▪ Realty and Property Management 		
Measures of Success	Desired Service Level Metrics	
<ul style="list-style-type: none"> ■ Demonstrated due diligence with respect to the management of City-owned property ■ Decreased risk and liability ■ Improved integration of the environmental investigation and remediation process with the redevelopment and Capital Budget process 	New	Improved over Current
	<ul style="list-style-type: none"> ■ The environmental status of the remaining City-owned properties in the Transportation and Works Department database is understood, risks are appropriately managed and opportunities for clean-up through redevelopment are identified and incorporated into the Capital Budget 	<ul style="list-style-type: none"> ■ The environmental condition of some City-owned properties is not well understood. Undertaking environmental investigations during the construction phase of site redevelopment can result in delays and increased clean-up costs



Environmental Management of City-Owned Property

Required Investment		2009	2010	2011
	OPERATING			
	Expenses	\$75,000	\$50,000	\$50,000
	Revenues (Specify Source)			
	Total OPERATING	\$75,000	\$50,000	\$50,000
	CAPITAL			
	Tax			
	Growth Based			
	Other (Specify Source)			
	Total CAPITAL			
	FTE			
	Permanent			
	Part-Time			
	Total FTE			
Dependencies:	<ul style="list-style-type: none"> ■ None 			
Risks:	<ul style="list-style-type: none"> ■ Conditions may be identified which require immediate mitigation measures 			
Risk Management Strategy:	<ul style="list-style-type: none"> ■ Having a Management Plan in place demonstrates due diligence by the City, decreases potential risk and liability and protects the value of our public assets 			
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Building a City for the 21st Century ■ Greening the Environment 			



Salt Management Plan Initiatives

What will be accomplished:	<ul style="list-style-type: none"> ■ The major deliverables for the plan are: the installation of oil grit separators in all yards.
When will it be accomplished:	<ul style="list-style-type: none"> ■ Salt Management Plan is an evolving program which changes with emerging technologies and environmental best practices and legislation. ■ The above project to be completed by 2010
Major Milestones:	<ul style="list-style-type: none"> ■ City adopted Salt Management Plan in 2004 ■ Installation of oil grit separators in all yards by 2010
Who is Accountable:	<ul style="list-style-type: none"> ■ Director of Engineering and Works

Who is Supporting:

- Transportation and Works Department
 - Engineering and Works Division
 - ◆ Works Operations and Maintenance Contracts Section
 - ◆ Business Services and Corporate Assets

Measures of Success	Desired Service Level Metrics	
	New	Improved over Current
<ul style="list-style-type: none"> ■ Conformity with City Salt Management Plan ■ Conformity with Environment Canada guidelines on the development and annual reporting of plan progress ■ Lessen environmental impact of the use of winter materials. 	<ul style="list-style-type: none"> ■ Containment oil and grit from winter vehicle wash water 	<ul style="list-style-type: none"> ■ Lessen the environmental impact of winter material (in this case sand)

Required Investment		2009	2010	2011
\$50 K annual allocation.	OPERATING			
	Expenses			
	Revenues (Specify Source)			
	Total OPERATING			
	CAPITAL			
	Tax	\$50,000	\$50,000	\$50,000
	Growth Based			
	Other (Specify Source)			
	Total CAPITAL	\$50,000	\$50,000	\$50,000
	FTE			
	Permanent			
	Part-Time			
	Total FTE			



Salt Management Plan Initiatives

Dependencies:	<ul style="list-style-type: none"> ■ Recruitment and/or secure services of training personnel
Risks:	<ul style="list-style-type: none"> ■ Not complying with the City Salt Management Plan ■ Release of oil and grit to the storm drainage system. <p>Non compliance with the Environmental Canada requirements</p>
Risk Management Strategy:	n/a
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Building a City for the 21st Century ■ Greening the Environment



Mississauga Storm Water Quality Control Strategy Update

What will be accomplished:	<ul style="list-style-type: none"> ■ The Mississauga Storm Water Quality Control Strategy Update will include an assessment of the current Strategy and its present state of implementation and level of success and the development of a City-wide plan reflecting best practice objectives for stormwater management which include lot level, conveyance and end-of-pipe controls. Another focus of this update study is to prepare a plan in support of the upcoming Development Charges By-law update and Mississauga Plan review. 	
When will it be accomplished:	<ul style="list-style-type: none"> ■ Completion of the study in 2009 ■ Implementation of the study recommendations in 2010 and beyond 	
Major Milestones:	<ul style="list-style-type: none"> ■ Study initiated in 2008, with efforts including field work and consultation with staff, public and agencies ■ Complete the consultation, the storm water quality implementation and monitoring plan and the final report in Spring 2009 	
Who is Accountable:	<ul style="list-style-type: none"> ■ Director of Transportation and Infrastructure Planning 	
Who is Supporting:		
<ul style="list-style-type: none"> ■ Land Development Services <ul style="list-style-type: none"> ▪ Land-use Policy ▪ Development Approval ■ Recreation and Parks <ul style="list-style-type: none"> ▪ Development of Green Space 		
Measures of Success	Desired Service Level Metrics	
<ul style="list-style-type: none"> ■ Environmental monitoring indicates an improvement to storm water quality and the overall health of the creeks and rivers in Mississauga 	New	Improved over Current
	<ul style="list-style-type: none"> ■ Lot-level and conveyance-level storm water control measures are implemented on new and existing developments 	<ul style="list-style-type: none"> ■ Storm water quality treatment is provided for a greater percentage of the City's developed areas



Mississauga Storm Water Quality Control Strategy Update

Required Investment		2009	2010	2011
Total Investment \$1.5 M \$500 K in 2007. \$500 K in 2012. \$500 K in 2017.	OPERATING			
	Expenses			
	Revenues (Specify Source)			
	Total OPERATING			
	CAPITAL			
	Tax			
	Growth Based			
	Other (Specify Source)			
	Total CAPITAL			
	FTE			
	Permanent			
	Part-Time			
	Total FTE			
Dependencies:	<ul style="list-style-type: none"> ■ Input from key internal staff in the preparation of the implementation plan for the strategy update 			
Risks:	<ul style="list-style-type: none"> ■ Funding and/or complexity of changes to development policies may impact negatively on the ability to implement the study recommendations 			
Risk Management Strategy:	<ul style="list-style-type: none"> ■ Opportunities for funding through Development Charges will be identified ■ Review of programs used in other municipalities to identify approaches used elsewhere ■ Consultation with staff, agencies, the public and other stakeholders 			
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Building a City for the 21st Century ■ Greening the Environment 			



Storm Drainage Network Modelling

What will be accomplished:	<ul style="list-style-type: none"> ■ Creation of a hydrologic/hydraulic model of the City’s storm drainage network within a pilot study area to provide a tool to assess impacts to the network caused by internal and external factors such as land use intensification and climate change. If the pilot is successful, the development of a City-wide model may be considered beyond 2010. 	
When will it be accomplished:	<ul style="list-style-type: none"> ■ Development of skeletal geographically based model and attribute database of storm drainage network in 2009 ■ Development of storm drainage network model for pilot sewer shed, potentially Cooksville Creek, in 2010 	
Major Milestones:	<ul style="list-style-type: none"> ■ Select drainage modeling software in early 2009 ■ Complete GIS model and database in late 2009 ■ Complete pilot storm drainage network model in 2010 ■ Evaluate the pilot model and consider the creation of a City-wide model as either a new in-house service with consulting assistance to develop the model or as an on-going out-sourced service 	
Who is Accountable:	<ul style="list-style-type: none"> ■ Director of Transportation and Infrastructure Planning 	
Who is Supporting:		
<ul style="list-style-type: none"> ■ Business Services and Corporate Assets <ul style="list-style-type: none"> ▪ Geomatics ■ Land Development Services <ul style="list-style-type: none"> ▪ Land-use Policy 		
Measures of Success	Desired Service Level Metrics	
<ul style="list-style-type: none"> ■ Ability to assess the impacts of factors such as climate change and land use intensification on the City’s storm drainage network ■ Better understanding of the probability, extent and consequence of any such impact ■ Ability to identify areas of concern and the need for changes to design standards and/or improvements to the storm drainage network 	New	Improved over Current
	<ul style="list-style-type: none"> ■ Storm drainage network has capacity to accommodate the forecasted land use intensification and climate change 	<ul style="list-style-type: none"> ■ Portions of the storm drainage network may not have capacity to accommodate land use intensification and climate change



Storm Drainage Network Modelling

Required Investment		2009	2010	2011	
Total Investment \$1.0 M.	OPERATING				
	Expenses				
	Revenues (Specify Source)				
	Total OPERATING				
	CAPITAL				
	Tax		\$234,000	\$703,000	
	Growth Based		\$16,000	\$47,000	
	Other (Specify Source)				
	Total CAPITAL		\$250,000	\$750,000	
	FTE				
	Permanent			1	
	Part-Time				
	Total FTE			1	
Dependencies:	<ul style="list-style-type: none"> ■ Need for enhancement of available GIS mapping of engineering network infrastructure 				
Risks:	<ul style="list-style-type: none"> ■ The review of standards may identify a decreased level of service in existing storm drainage network ■ May require standards for network infrastructure to provide a higher level of service and be more expensive to construct 				
Risk Management Strategy:	<ul style="list-style-type: none"> ■ Developing an understanding of the impacts of climate change and land use intensification on storm drainage infrastructure and standards will provide an opportunity to plan for and adapt to the changes 				
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Building a City for the 21st Century ■ State of Good Repair for Infrastructure 				



Pavement Management System

What will be accomplished:	<ul style="list-style-type: none"> ■ Implementation of an upgraded Pavement Management System used in the evaluation of short and long term rehabilitation requirements for the City's road network 		
When will it be accomplished:	<ul style="list-style-type: none"> ■ Start in 2009 with data completion in 2010 		
Major Milestones:	<ul style="list-style-type: none"> ■ 2009 System upgrade and data collection ■ 2010 completion of data analysis 		
Who is Accountable:	<ul style="list-style-type: none"> ■ Director of Transportation and Infrastructure Planning 		
Who is Supporting:			
<ul style="list-style-type: none"> ■ Business Services ■ IT ■ Materiel Management 			
Measures of Success		Desired Service Level Metrics	
<ul style="list-style-type: none"> ■ Confirmation of existing data – validation ■ Ability to generate long term forecasting ■ Maintain data collection cycle 		New	Improved over Current
		<ul style="list-style-type: none"> ■ Long term forecasting 	<ul style="list-style-type: none"> ■ Restricted ability to forecast beyond 10 years
Required Investment		2009	2010
<p>Total Investment \$850 K.</p> <p>\$250 K in 2008. \$600 K in 2009 for data collection.</p> <p>Allocation \$600 K every 3rd year starting in 2012.</p>	OPERATING		
	Expenses		
	Revenues (Specify Source)		
	Total OPERATING		
	CAPITAL		
	Tax	\$600,000	
	Growth Based		
	Other (Specify Source)		
	Total CAPITAL	\$600,000	
	FTE		
Permanent			
Part-Time			
Total FTE			



Pavement Management System

Dependencies:	<ul style="list-style-type: none"> ■ Recruitment of PMS consultant
Risks:	n/a
Risk Management Strategy:	n/a
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Building a City for the 21st Century ■ State of Good Repair for Infrastructure



Road Right-of-Way Design Standards

What will be accomplished:	<ul style="list-style-type: none"> ■ Implementation of new design standards that may be required for new road classifications as determined through the Road ROW Classification Study. This will follow the development of ROW guidelines being developed as part of the new Road Classification System. 			
When will it be accomplished:	<ul style="list-style-type: none"> ■ 2009/2010 			
Major Milestones:	n/a			
Who is Accountable:	<ul style="list-style-type: none"> ■ Director of Transportation and Infrastructure Planning 			
Who is Supporting:				
<ul style="list-style-type: none"> ■ Transportation and Works – Engineering and Works ■ Development Engineering ■ Planning and Building D&D ■ Community Services Planning and Heritage 				
Measures of Success		Desired Service Level Metrics		
<ul style="list-style-type: none"> ■ Development of standards that reflect new Road Classifications 		New	Improved over Current	
		n/a	n/a	
Required Investment		2009	2010	2011
In house	OPERATING			
	Expenses			
	Revenues (Specify Source)			
	Total OPERATING			
	CAPITAL			
	Tax			
	Growth Based			
	Other (Specify Source)			
	Total CAPITAL			
	FTE			
	Permanent			
	Part-Time			
	Total FTE			



Road Right-of-Way Design Standards

Dependencies:	<ul style="list-style-type: none"> ■ T and W Road Classification Study
Risks:	n/a
Risk Management Strategy:	n/a
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Building a City for the 21st Century



Road Cut Restorations and Monitoring

What will be accomplished:	<ul style="list-style-type: none"> ■ Perform all road cut restorations by City contracted forces as opposed to the current practice where utility contractors perform final road restorations. 	
When will it be accomplished:	<ul style="list-style-type: none"> ■ Project to be completed by 2011 	
Major Milestones:	n/a	
Who is Accountable:	<ul style="list-style-type: none"> ■ Director of Engineering and Works 	
Who is Supporting:		
<ul style="list-style-type: none"> ■ Transportation and Works Department <ul style="list-style-type: none"> ▪ Engineering and Works Division Standards and Permitting section Works Operations and Maintenance Contracts Section 		
Measures of Success	Desired Service Level Metrics	
<ul style="list-style-type: none"> ■ All road restorations completed by City forces will be to City standard on a consistent basis 	New	Improved over Current
	<ul style="list-style-type: none"> ■ All road restorations will be in accordance to City standards consistently 	<ul style="list-style-type: none"> ■ City road restorations currently being performed by others and work may not always be to City standards without close inspection by City staff.



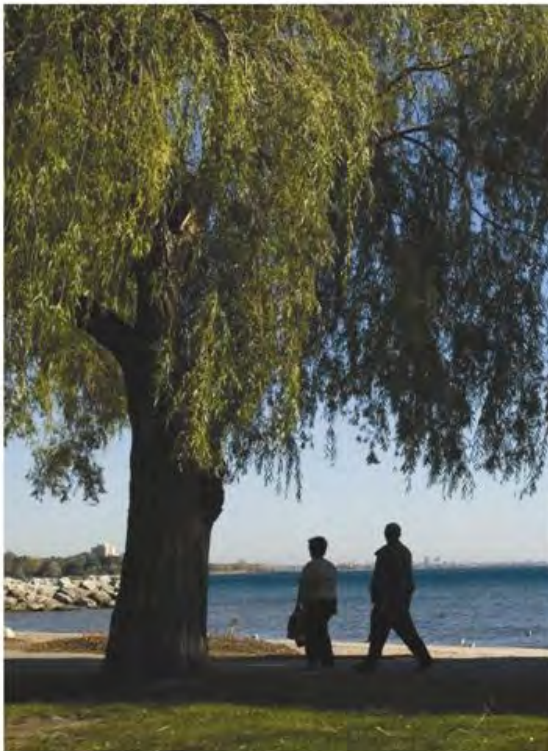
Road Cut Restorations and Monitoring

Required Investment		2009	2010	2011
Work is 100% recoverable	OPERATING			
	Expenses			
	Revenues (Specify Source)			
	Total OPERATING			
	CAPITAL			
	Tax			
	Growth Based			
	Other (Specify Source)			
	Total CAPITAL			
	FTE			
	Permanent			3
	Part-Time			
Total FTE			3	
Dependencies:	<ul style="list-style-type: none"> ■ Availability of qualified contractors 			
Risks:	<ul style="list-style-type: none"> ■ Road repairs may not be to City Standards Shorten overall life of road pavement if not done by City forces 			
Risk Management Strategy:	n/a			
Contribution to the City's Strategic Priorities:	<ul style="list-style-type: none"> ■ Building a City for the 21st Century ■ State of Good Repair for Infrastructure ■ Greening the Environment 			



Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget



Budget



Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

3 YEAR BUDGET AND FORECAST

	2008 Budget	2009 Budget	2010 Budget	2011 Forecast
Labour Costs	23,951,800	25,711,600	27,191,900	29,009,500
Other Operating Expenses	36,024,000	39,980,300	43,685,000	45,489,800
TOTAL COSTS	59,975,800	65,691,900	70,876,900	74,499,300
TOTAL REVENUES	(9,877,400)	(10,389,100)	(10,608,500)	(10,608,500)
NET COSTS	50,098,400	55,302,800	60,268,400	63,890,800
Allocations	2,346,500	2,583,700	2,713,800	2,813,900
NET of ALLOCATIONS	52,444,900	57,886,500	62,982,200	66,704,700



Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

Human Resources Requirement

	Total FTE
2008 Establishment	375
2009 Budget Recommendation	393
2010 Budget Recommendation	400

Human Resources Requirement Distribution

Program	2008	2009	2010
Maintenance Control*	118	133	139
Development Construction	13	13	13
Engineering & Works	53	55	55
Corporate Fleet Maintenance	27	28	29
Transportation & Infrastructure Planning	44	44	44
Crossing Guards	67	68	68
Traffic Management	53	52	52
Total Recommended	375	393	400

* The Maintenance Control Program includes complement for Sewer, Bridge and Watercourse Maintenance, Winter Maintenance, Roads & Sidewalk Maintenance and Clean & Litter Pick-up.

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

BUDGET OVERVIEW

ROADS, STORM DRAINAGE AND WATERCOURSES

	2007 Actual	2008 Budget	2009 Base Budget	2009 Program Changes	2009 Request	2009 Change		2010 Base Budget	2010 Program Changes	2010 Request	2010 Change	
	\$	\$	\$	\$	\$	\$	%	\$	\$	\$	\$	%
EXPENDITURES												
LABOUR COST	23,040,576	23,951,800	25,868,000	(156,400)	25,711,600	1,759,800	7.3%	27,173,000	18,900	27,191,900	1,480,300	5.8%
Staff Development Costs	84,269	101,600	101,600	(8,800)	92,800	(8,800)	-8.7%	92,800	0	92,800	0	0.0%
Communications Costs	536,272	532,500	607,500	0	607,500	75,000	14.1%	622,500	0	622,500	15,000	2.5%
Transportation Costs	(1,684,843)	(1,957,400)	(1,912,400)	(80,000)	(1,992,400)	(35,000)	-1.8%	(1,992,400)	0	(1,992,400)	0	0.0%
Occupancy & City Costs	5,325,523	6,223,200	7,587,300	(156,200)	7,431,100	1,207,900	19.4%	7,547,200	(3,400)	7,543,800	112,700	1.5%
Equipment Costs & Maintenance Agreement	70,568	69,200	69,200	0	69,200	0	0.0%	69,200	0	69,200	0	0.0%
Contractor & Professional Services	22,121,455	22,662,100	24,224,100	368,000	24,592,100	1,930,000	8.5%	26,019,100	1,475,000	27,494,100	2,902,000	11.8%
Advertising & Promotions	45,103	40,000	40,000	0	40,000	0	0.0%	40,000	0	40,000	0	0.0%
Materials, Supplies & Other Services	8,084,097	8,212,500	8,957,500	(108,000)	8,849,500	637,000	7.8%	9,524,500	0	9,524,500	675,000	7.6%
Finance Other	(3,733)	108,700	38,700	0	38,700	(70,000)	-64.4%	38,700	0	38,700	0	0.0%
Transfers	119,215	31,600	251,800	0	251,800	220,200	696.8%	251,800	0	251,800	0	0.0%
OTHER OPERATING EXPENSES	34,697,927	36,024,000	39,965,300	15,000	39,980,300	3,956,300	11.0%	42,213,400	1,471,600	43,685,000	3,704,700	9.3%
TOTAL EXPENDITURES	57,738,503	59,975,800	65,833,300	(141,400)	65,691,900	5,716,100	9.5%	69,386,400	1,490,500	70,876,900	5,185,000	7.9%
REVENUES												
Fees & Service Charges	(5,639,592)	(5,273,100)	(5,625,100)	(159,700)	(5,784,800)	(511,700)	-9.7%	(5,684,800)	(319,400)	(6,004,200)	(219,400)	-3.8%
Other Revenue	(2,505)	0	0	0	0	0	0.0%	0	0	0	0	0.0%
Transfers	(3,414,176)	(3,574,300)	(3,574,300)	0	(3,574,300)	0	0.0%	(3,574,300)	0	(3,574,300)	0	0.0%
TOTAL REVENUES	(10,338,785)	(9,877,400)	(10,229,400)	(159,700)	(10,389,100)	(511,700)	-5.2%	(10,289,100)	(319,400)	(10,608,500)	(219,400)	-2.1%
NET SERVICE IMPACT	47,399,718	50,098,400	55,603,900	(301,100)	55,302,800	5,204,400	10.4%	59,097,300	1,171,100	60,268,400	4,965,600	9.0%
Allocations	0	2,346,500	2,583,700	0	2,583,700	237,200	10.1%	2,713,800	0	2,713,800	130,100	5.0%
NET of ALLOCATIONS	47,399,718	52,444,900	58,187,600	(301,100)	57,886,500	5,441,600	10.4%	61,811,100	1,171,100	62,982,200	5,095,700	8.8%

Roads, Storm Drainage & Watercourses

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2009 NET BUDGET BY PROGRAM

ROADS, STORM DRAINAGE AND WATERCOURSES

	2007 Actual	2008 Budget	2009 Base Budget	2009 Program Changes	2009 Request	2009 Change		2010 Base Budget	2010 Program Changes	2010 Request	2010 Change	
	\$	\$	\$	\$	\$	\$	%	\$	\$	\$	\$	%
PROGRAM EXPENDITURES												
Maintenance Control	6,436,878	7,627,300	8,860,600	(10,700)	8,849,900	1,222,600	16.0%	10,472,500	(3,400)	10,469,100	1,619,200	18.3%
Sewer Bridges & Watercourses	1,007,510	1,253,800	1,291,200	(100,000)	1,191,200	(62,600)	-5.0%	1,226,200	0	1,226,200	35,000	2.9%
Winter Maintenance	15,183,916	14,516,400	15,751,900	629,400	16,381,300	1,864,900	12.8%	17,881,300	1,325,000	19,206,300	2,825,000	17.2%
Roads and Sidewalk Maintenance	5,565,493	4,867,000	4,989,500	(439,300)	4,550,200	(316,800)	-6.5%	4,665,200	0	4,665,200	115,000	2.5%
Cleaning and Litter Pickup	2,673,909	3,547,500	3,559,600	6,600	3,566,200	18,700	0.5%	3,641,200	100,000	3,741,200	175,000	4.9%
Development Construction	946,518	1,063,600	1,090,800	0	1,090,800	27,200	2.6%	1,090,800	0	1,090,800	0	0.0%
Engineering & Capital Works	(1,516,135)	(212,500)	13,500	0	13,500	226,000	106.4%	13,500	0	13,500	0	0.0%
Corporate Fleet Maintenance	931,289	747,200	1,164,100	(51,400)	1,112,700	365,500	48.9%	1,242,700	18,900	1,261,600	148,900	13.4%
Transportation & Infrastructure Planning	2,455,340	3,813,600	3,759,200	(87,700)	3,671,500	(142,100)	-3.7%	3,871,500	(269,400)	3,602,100	(69,400)	-1.9%
Streetlighting	5,127,616	5,673,600	7,073,600	(148,000)	6,925,600	1,252,000	22.1%	7,025,600	0	7,025,600	100,000	1.4%
Crossing Guards	2,216,674	2,217,600	2,388,600	0	2,388,600	171,000	7.7%	2,388,600	0	2,388,600	0	0.0%
Traffic Management	6,370,710	7,329,800	8,245,000	(100,000)	8,145,000	815,200	11.1%	8,292,000	0	8,292,000	147,000	1.8%
NET PROGRAM IMPACT	47,399,718	52,444,900	58,187,600	(301,100)	57,886,500	5,441,600	10%	3,924,600	1,171,100	62,982,200	5,095,700	9%

Roads, Storm Drainage & Watercourses

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Service Budget Highlights - Operating

The recommended 2009 Total Operating Expenditures of \$65.7 million (gross) is \$5.7 million, or 9.5%, more than the 2008 Revised Total Operating Expenditure for the service. This increase provides the funding necessary to maintain current service levels and programs and to move forward with planned Roads, Storm Drainage & Watercourses initiatives.

The recommended 2009 Net Operating Plan of \$55.3 million represents an increase of \$5.2 million or 10.4% from the 2008 Operating Plan.

2009 Highlights of the recommended budget include :

- Program reductions identified by the Leadership team and endorsed by Council include the following:
 - \$200k for the elimination of two vehicles and four FTEs’;
 - \$250k for permanent sidewalk repair funding, or 50%;
 - \$75k for regular sweeping program, or 50%;
 - \$100k for special pavement markings;
 - \$100k for asphalt maintenance repairs; and
 - \$100k for storm drainage maintenance & repairs.

- The Winter Maintenance Program increased by \$1.9 million. The various increases, followed by budget reductions are detailed below:
 - \$930k for contract pressures and sidewalk plowing route growth;
 - \$300k for salt and sand costs;
 - \$700k for improvements to priority sidewalk and bus stops;
 - \$25k for automated vehicle locators; and
 - \$91k (net) decrease as a result of the planned elimination of 2 City vehicles, offset partially by an increase in contracted services.

Service Budget Highlights - Operating

- The Traffic Management Program increased by \$815k. The various components of this increase, followed by a budget reduction are as follows:
 - \$192k for performance pay and economic adjustment increases, labour adjustments, and other fringe benefit changes;
 - \$75k for traffic communication maintenance;
 - \$125k for traffic data count;
 - \$287k for traffic signal maintenance contract;
 - \$25k for sign making equipment new/replacement; and
 - \$150k for pay and display loan repayment adjustment.
 - Program reductions identified by the Leadership team and endorsed by Council:
 - \$100k in special pavement markings.
- The Streetlighting Program increased by \$1.3 million (net). The various increases, followed by budget reductions are as follows:
 - \$1.4m for electricity cost increases;
 - \$244k Streetlighting review implementation; and
 - \$392k program reductions from contract negotiations with Enersource.
- One new Mechanic position is required based on the recommendation of the Corporate Fleet Maintenance e3 Review. The review developed strategies which are expected to result in the minimization or elimination of performance gaps and allow the Corporate Fleet Service Centre to perform at its optimal level of efficiency, effectiveness and economy for both short tem savings and to maintain a long term path of continuous improvement.
- Temporary staff funding for road maintenance activities is being increased by \$0.8 million to align the budget with expenditures. This funding is required to maintain existing service levels in an increasingly more demanding and complicated business environment and under increasingly more challenging fiscal conditions.



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Service Budget Highlights - Operating

- A decline of \$100k in Development Engineering Fees:
 - General decline in development related activity as the number and size of green field developments continues to decrease, giving way to infill and intensification developments.

- An increase of \$175k for additional studies for:
 - Engineering/traffic studies related to development applications and district plan reviews (Transportation Asset Management); and
 - Environmental management of City-owned property.

Service Budget Highlights - Operating

2010 Highlights of the recommended budget include :

- Winter Maintenance Program increase of \$2.8 million. The components of the increase are as follows:
 - \$1.3 million for winter maintenance service levels;
 - \$700k for winter maintenance contract cost increases;
 - \$300k for anti-icing program;
 - \$500k for the purchase of sand and salt; and
 - \$25k for automated vehicle locators.

- Engineering and Works division budget increase of \$952k for the various programs listed below:
 - \$100k for Streetlighting Program;
 - \$147k for Traffic Management Program regarding traffic system maintenance, traffic signal maintenance, traffic data count and special markings;
 - \$130k for Corporate Fleet Maintenance Program for the service centre fuel increase (.20 cent per litre);
 - \$175k for Cleaning Litter Program for boulevard/island/walkway cleaning, street cleanliness waste bin pickup, waste haulage and disposal, leaf pickup, walkway/sidewalk cleaning and graffiti cleaning;
 - \$115k for Road Sidewalk Maintenance program for the hot and cold asphalt mix, fence repairs and sidewalk repairs to meet deficiencies criteria;
 - \$35k for Sewer, Bridges and Watercourses for expanded preventative maintenance work; and
 - \$250k for the Maintenance Control Program to align budget with expenditures to ensure existing service levels are maintained.



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Service Budget Highlights - Capital

Roads, Storm Drainage & Watercourses capital highlights include:

2009 Highlights:

- A total of \$83 million (net) funding is recommended for the 2009 Roads, Storm Drainage & Watercourses capital budget.
- The 2009 program continues to reflect the department's mission:
 - To plan and develop a transportation system
 - To oversee the construction of the City's roads and roadway-related assets
 - To safeguard public and private infrastructure and property from erosion and flooding

Significant 2009 projects include:

- \$27.5 million (net) for major roads and related works
 - **Construction Work Plan**
 - Torbram Road grade separations
 - Burnhamthorpe Road from Arista Way to Dixie Road
 - Hurontario Street from Park Street to Lakeshore
 - Phase 2 - Hurontario Street and Highway 401 interchange improvements
 - Goreway Drive grade separation – detailed design

Roads, Storm Drainage & Watercourses

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Service Budget Highlights - Capital

- \$21.8 million (net) for Road Rehabilitation program
 - 30 residential streets
 - 14 major and industrial roads
 - Pavement management system upgrade
- \$23 million (net) for Other Engineering program
 - \$2M for Traffic Signals program; 15 new signal locations and Traffic Signals pre-emption equipment
 - \$7.2M Property acquisition; Ridgeway Drive, Creekbank Road and Torbram Road
 - \$6M for the Southeast Works Yard
 - \$715k for the sidewalk program funded by development charges and developer contributions
 - \$3.4M for the Vehicle and Equipment Replacement program
- \$5.1 million (net) for Bridges and Culverts rehabilitation program
 - The Collegeway, west of Mississauga Road
 - Mavis Road over Fletcher's Creek
 - Cooksville GO pedestrian overpass
 - 3 other rehabilitation projects
- \$5.6 million (net) for Storm Drainage program
 - Park Royal (near Lewisham Dr) drainage improvement
 - Dakota Rd and Full Moon Circle ground water relief study
 - Dundas Street West (Clayhill Rd. to Mason Heights) storm sewer replacement
 - Osprey Marsh (9th line) SWM Pond
 - Sheridan Creek (Down Stream of Meadow Wood Rd.) erosion control
 - Mary Fix Creek and Cooksville Creek design projects
 - Meadowvale Business Park - North 16 District

Service Budget Highlights - Capital

2010 Highlights:

A total of \$71.3 million (net) funding is recommended for the 2010 Roads, Storm Drainage & Watercourses capital budget.

Significant 2010 projects include:

- \$30 million (net) for major roads and related works
 - **Construction Work Plan**
 - Goreway Drive grade separation
 - Phase 2 Burnhamthorpe Road from Arista Way to Dixie Road
 - Drew Road – Tomken Road to Dixie Road
 - Phase 3 - Hurontario Street and Highway 401 interchange improvements
 - Creekbank Road extension, include structure over highway 401
- \$21.3 million (net) for Road Rehabilitation program
- \$2.5 million (net) for Traffic Signals program
 - 15 new signal locations added annually
 - LED City Wide Traffic Signal Lens Replacement
- \$2.1 million (net) for Bridges and Culverts rehabilitation program
- \$6.6 million (net) for Storm Drainage program
 - Retrofit Loyalist Creek storm water management pond
 - Mullet Creek Erosion Control
 - Sheridan Creek Erosion Control

Service Budget Highlights - Capital

- \$200k (net) for the sidewalk program funded by development charges and developer contributions

2009-2018 Highlights:

- A total \$555.8 million (net) funding is recommended for the Roads, Storm Drainage & Watercourses budget over the next ten years
- \$229.8 million (net) for the Road Rehabilitation, program funding has decreased by \$1.9 million over the previous 10 year plan
 - Delaying ~100 streets (mostly residential) by 1-2 years over a 10 year period
 - Increased demand maintenance
 - Limited ability to fund reconstruction program
 - Proposed new environmentally-friendly ditching program to mitigate water/maintenance concerns
 - Network impact should be determined over 20 years
- \$126.8 million (net) for the Major Roads program, an decrease of \$40.5 million over the previous 10 year plan
 - 87% of the program funded from development charges (DCs) and the balance from taxes
 - Significant shift relative to previous 10 year plan as a result of cost increases - \$15M deferred
 - Several major joint projects advanced to align timing with MTO
 - Other projects advanced due to development pressures
 - Multi year funding of large projects was utilized, where feasible, in recognition of lower DC revenues in the future
 - Hurontario/401 group of projects
 - Creekbank Road (incl. Structure)
 - Overall program matches DC funding availability

Roads, Storm Drainage & Watercourses

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Service Budget Highlights - Capital

- Major roads included in the plan for 2009 and beyond are as follows:

Argentia Road	Derry Road
Belgrave Drive	Goreway Drive Grade Separation
Britannia	Highway 401 Ramp Extension - Mavis
Burnhamthorpe Road	Hurontario Street
Centreview	Mavis Road
City Centre	McLaughlin Road
Courtneypark Drive	Park Street East
Creditview Road	Tenth Line West
Creebank Road Extension	Whittle Road
Edwards Blvd Extension	Torbram Road Grade Separations
Drew Road widening and grade separation	

- \$77 million (net) for the Storm Drainage program
 - Lower risk projects were delayed in program or bumped from forecast to meet funding constraints
- \$23.3 million (net) for the Traffic Signal program
 - LED replacements
 - New and rebuilt traffic signals
 - Additional fire pre-emption equipment
 - Traffic computer upgrade and Intelligent Transportation System (ITS) control room
 - Integrated Road Safety Program (IRSP)
 - Traffic Management Centre

Roads, Storm Drainage & Watercourses

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Service Budget Highlights - Capital

- \$29.7 million (net) for the Vehicle and Equipment Replacement program
 - Program funding held constant despite continued growth in total City fleet
 - Recommendations from the City Fleet Emissions Reduction Study relating to right-sizing have been incorporated into the replacement plan
- \$22.1 million (net) for the Bridges and Culverts program
 - Funding front-ended to accommodate 2009 projects
 - Funding levels in latter years needs to be reviewed in 2009
 - Pending results of life cycle costing from new bridge management system
- \$14.2 million (net) for the Street Lighting program
- \$2.5 million (net) for the Sidewalk program
- \$6.8 million (net) for the Noise Wall program
 - front end funding through 2012 to address NOW and 1 – 5 year needs
 - 5 replacement locations identified in 2009 program including Burnhamthorpe Road East noise barrier
 - Program co-payment funding by both the City and residents is available, however lack of resident support and co-operation slows implementation
 - Funding doesn't match overall long term needs



Roads, Storm Drainage & Watercourses

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Service Budget Highlights - Capital

Summary:

- The net 2009 - 2018 Capital Budget and Forecast for the Roads, Storm Drainage & Watercourses is approximately \$42.1 million less than the prior 10 year forecast. The plan continues to reflect the departments' emphasis on maintaining existing infrastructure and providing a controlled expansion of capital infrastructure to handle growth.
- In the long term, the combination of costs that are increasing significantly faster than the additional tax funding being allocated to the capital program will lead to:
 - Lowered/adjusted service levels for pavement and other infrastructure
 - Increased pressure in the future on the operating budget and staff
 - Increased risk exposure
 - Higher lifecycle, operating and total ownership costs
- These programs will be monitored and adjusted on an annual basis as required
 -



Roads, Storm Drainage & Watercourses

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Operating



Roads, Storm Drainage & Watercourses

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Roads, Storm Drainage & Watercourses

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2009 Explanation of Budget Changes

Program: Maintenance Control

Description of Program

Identification of maintenance needs, preparation and management of maintenance tenders and co-ordination and direction with respect to maintenance programs.

	2008 Restated Budget	2009 Requested Budget	Change in 2009 Requested Budget To 2008 Restated Budget		Explanation
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	4,038,100	5,099,700	1,061,600	26.3%	- The increase in permanent labour costs reflects adjustments for the following items: - Performance pay and economic adjustment increases, labour adjustments, and other fringe benefit changes. Including the annualization of the Utility Cut Technician position added in 2008. - Labour savings achieved through the elimination of two city vehicles. - The budget was increased by \$800k for temporary wages to be in line with 2007 actuals.
Staff Development Costs	67,200	61,400	(5,800)	-8.6%	
Communication Costs	71,500	71,500	0	0.0%	
Transportation Costs	438,300	438,300	0	0.0%	
Occupancy & City Costs	377,000	366,600	(10,400)	-2.8%	- Budget decreased to reflect reduced utilities cost allocations.
Equipment Costs & Maintenance Agreements	29,300	29,300	0	0.0%	

Roads, Storm Drainage & Watercourses

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2009 EXPLANATION OF BUDGET CHANGES

PROGRAM: MAINTENANCE CONTROL

	2008	2009	Change in 2009		Explanation
	Restated Budget	Requested Budget	Requested Budget To 2008 Restated Budget		
	\$	\$	\$	%	
Contractor & Professional Services	59,700	59,700	0	0.0%	
Advertising & Promotions	8,800	8,800	0	0.0%	
Materials, Supplies & Other Services	295,000	310,000	15,000	5.1%	- Cost increases for tool and clothing allowances
Finance Other	(37,700)	(37,700)	0	0.0%	
OTHER OPERATING EXPENSES	1,309,100	1,307,900	(1,200)	-0.1%	
TOTAL EXPENDITURES	5,347,200	6,407,600	1,060,400	19.8%	
REVENUES					
Fees & Service Charges	(16,000)	(16,000)	0	0.0%	
TOTAL REVENUES	(16,000)	(16,000)	0	0.0%	
Allocations	2,296,100	2,458,300	162,200	7.1%	- The budget was increased for the economic adjustments for rising labour costs within Business Services Division. These costs are allocated among each of the Service Areas within the Department
NET PROGRAM IMPACT	7,627,300	8,849,900	1,222,600	16.0%	

Roads, Storm Drainage & Watercourses

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2010 EXPLANATION OF BUDGET CHANGES

PROGRAM: MAINTENANCE CONTROL

	2009	2010	Change in 2010		Explanation
	Budget	Requested Budget	Requested Budget To 2009 Budget		
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	5,099,700	6,561,100	1,461,400	28.7%	- The increase in permanent labour costs reflects performance pay and economic adjustment increases, labour adjustments, other fringe benefit changes and increases to bring temporary wages in line with 2007 actuals.
Occupancy & City Costs	366,600	379,300	12,700	3.5%	- Cost increases for utilities.
Materials, Supplies & Other Services	310,000	325,000	15,000	4.8%	- Cost increases for tool and clothing allowances.
Finance Other	(37,700)	(37,700)	0	0.0%	
OTHER OPERATING EXPENSES	1,307,900	1,335,600	27,700	2.1%	
TOTAL EXPENDITURES	6,407,600	7,896,700	1,489,100	23.2%	
REVENUES					
Fees & Service Charges	(16,000)	(16,000)	0	0.0%	
TOTAL REVENUES	(16,000)	(16,000)	0	0.0%	
Allocations	2,458,300	2,588,400	130,100	5.3%	- The budget was increased for the economic adjustments for rising labour costs within Business Services Division. These costs are allocated among each of the Service Areas within the Department.
NET PROGRAM IMPACT	8,849,900	10,469,100	1,619,200	18.3%	

Roads, Storm Drainage & Watercourses

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2009 Explanation of Budget Changes

Program: Sewer, Bridge and Watercourse Maintenance

Description of Program

Maintenance and minor repairs of structures, repair and replacement of headwalls in cross culverts and driveways and installation of cross culverts, bridge preventative maintenance work, including sidewalk and rail repair, repair and installation of entrance culvert headwalls and cross culverts and repairs to the City's storm sewer system, including the reconstruction of storm sewer outlets and repair of cracked and broken storm sewer pipes, emergency storm sewer repairs, the installation of new catchbasins and storm sewer sections and the repair of manholes and catch basins.

	2008 Restated Budget	2009 Requested Budget	Change in 2009 Requested Budget To 2008 Restated Budget		Explanation
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	265,200	267,600	2,400	0.9%	
Transportation Costs	53,300	53,300	0	0.0%	
Contractor & Professional Services	998,000	933,000	(65,000)	-6.5%	- The budget was decrease to relate to storm drainage maintenance and repairs.
Materials, Supplies & Other Services	65,900	65,900	0	0.0%	
OTHER OPERATING EXPENSES	1,117,200	1,052,200	(65,000)	-5.8%	
TOTAL EXPENDITURES	1,382,400	1,319,800	(62,600)	-4.5%	
REVENUES					
Fees & Service Charges	(128,600)	(128,600)	0	0.0%	
TOTAL REVENUES	(128,600)	(128,600)	0	0.0%	
NET PROGRAM IMPACT	1,253,800	1,191,200	(62,600)	-5.0%	

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2010 EXPLANATION OF BUDGET CHANGES

PROGRAM: SEWERS, BRIDGES & WATERCOURSES

	2009 Budget	2010 Requested Budget	Change in 2010 Requested Budget To 2009 Budget		Explanation
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	267,600	267,600	0	0.0%	
Transportation Costs	53,300	53,300	0	0.0%	
Contractor & Professional Services	933,000	968,000	35,000	3.8%	- Budget increased to reflect expanded preventative maintenance on bridge cleaning/power washing.
Materials, Supplies & Other Services	65,900	65,900	0	0.0%	
OTHER OPERATING EXPENSES	1,052,200	1,087,200	35,000	3.3%	
TOTAL EXPENDITURES	1,319,800	1,354,800	35,000	2.7%	
REVENUES					
Fees & Service Charges	(128,600)	(128,600)	0	0.0%	
TOTAL REVENUES	(128,600)	(128,600)	0	0.0%	
NET PROGRAM IMPACT	1,191,200	1,226,200	35,000	2.9%	

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2009 Explanation of Budget Changes

Program: Winter Maintenance

Description of Program

Winter maintenance operations including ploughing, sanding and salting of roads, sidewalks, bus stops and bus shelters as required during the winter season.

	2008 Restated Budget	2009 Requested Budget	Change in 2009 Requested Budget To 2008 Restated Budget		Explanation
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	1,271,300	1,213,200	(58,100)	-4.6%	- Labour savings achieved through the elimination of two city vehicles.
Transportation Costs	611,400	579,400	(32,000)	-5.2%	- Transportation cost savings achieved through the elimination of two city vehicles.
Contractor & Professional Services	9,007,500	10,662,500	1,655,000	18.4%	Increases in Contractor and Professional Services are attributed to the following: -\$700k to maintain winter maintenance service levels. -\$700k for cost increases in winter maintenance contracts. -\$250k relates to sidewalk clearing.
Materials, Supplies & Other Services	4,239,700	4,539,700	300,000	7.1%	- For the additional purchase of sand and salt.
OTHER OPERATING EXPENSES	13,858,600	15,781,600	1,923,000	13.9%	
TOTAL EXPENDITURES	15,129,900	16,994,800	1,864,900	12.3%	
REVENUES					
Fees & Service Charges	(463,500)	(463,500)	0	0.0%	
Transfers	(150,000)	(150,000)	0	0.0%	
TOTAL REVENUES	(613,500)	(613,500)	0	0.0%	
NET PROGRAM IMPACT	14,516,400	16,381,300	1,864,900	12.8%	

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2010 EXPLANATION OF BUDGET CHANGES

PROGRAM: WINTER MAINTENANCE

	2009 Budget	2010 Requested Budget	Change in 2010 Requested Budget To 2009 Budget		Explanation
			\$	%	
EXPENDITURES					
LABOUR COST	1,213,200	1,213,200	0	0.0%	
Transportation Costs	579,400	579,400	0	0.0%	
Contractor & Professional Services	10,662,500	12,987,500	2,325,000	21.8%	Cost increases are attributed to the following: - \$1.3m for increased service levels in clearing sidewalks and secondary roads, bus stop maintenance and snow removal. - \$700k for cost increases in winter maintenance contracts. - \$25k for automated vehicle locators. - \$300k for the anti-icing program.
Materials, Supplies & Other Services	4,539,700	5,039,700	500,000	11.0%	- For the additional purchase of sand and salt.
OTHER OPERATING EXPENSES	15,781,600	18,606,600	2,825,000	17.9%	
TOTAL EXPENDITURES	16,994,800	19,819,800	2,825,000	16.6%	
REVENUES					
Fees & Service Charges	(463,500)	(463,500)	0	0.0%	
Transfers	(150,000)	(150,000)	0	0.0%	
TOTAL REVENUES	(613,500)	(613,500)	0	0.0%	
NET PROGRAM IMPACT	16,381,300	19,206,300	2,825,000	17.2%	

Roads, Storm Drainage & Watercourses

2009 & 2010 business plan and budget

2009 Explanation of Budget Changes

Program: Roads & Sidewalk Maintenance

Description of Program

Road repair, base reinforcement, guide rail installation and maintenance, grading and shoulder reconstruction, ditching activities and boundary road maintenance, repair/replacement of sidewalk slabs that are heaved or depressed and the installation or repair of fences on City rights-of-way.

	2008 Restated Budget	2009 Requested Budget	Change in 2009 Requested Budget To 2008 Restated Budget		Explanation
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	1,011,700	939,900	(71,800)	-7.1%	Labour savings achieved through the elimination of two city vehicles.
Transportation Costs	242,400	232,400	(10,000)	-4.1%	Transportation cost savings were achieved through the elimination of two city vehicles.
Contractor & Professional Services	5,987,000	5,727,000	(260,000)	-4.3%	The net reductions to the contractors and professional services were achieved in the following initiatives: - (\$100k) decrease for asphalt maintenance repairs. - (\$250k) decrease for permanent sidewalk repairs. - \$75k increase to meet deficiency criteria and outstanding work requests.
Materials, Supplies & Other Services	147,200	172,200	25,000	17.0%	- Cost increases for asphalt repair hot and cold mix.
OTHER OPERATING EXPENSES	6,376,600	6,131,600	(245,000)	-3.8%	
TOTAL EXPENDITURES	7,388,300	7,071,500	(316,800)	-4.3%	
REVENUES					
Fees & Service Charges	(2,521,300)	(2,521,300)	0	0.0%	
TOTAL REVENUES	(2,521,300)	(2,521,300)	0	0.0%	
NET PROGRAM IMPACT	4,867,000	4,550,200	(316,800)	-6.5%	

Roads, Storm Drainage & Watercourses

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2010 EXPLANATION OF BUDGET CHANGES

PROGRAM: ROAD/SIDEWALK MAINTENANCE

	2009 Budget	2010 Requested Budget	Change in 2010 Requested Budget To 2009 Budget		Explanation
			\$	%	
EXPENDITURES					
LABOUR COST	939,900	939,900	0	0.0%	
Transportation Costs	232,400	232,400	0	0.0%	
Contractor & Professional Services	5,727,000	5,817,000	90,000	1.6%	- Cost increases for sidewalk repairs and for fence repairs.
Advertising & Promotions	0	0	0	0.0%	
Materials, Supplies & Other Services	172,200	197,200	25,000	14.5%	- Cost increases for asphalt repair hot and cold mix.
OTHER OPERATING EXPENSES	6,131,600	6,246,600	115,000	1.9%	
TOTAL EXPENDITURES	7,071,500	7,186,500	115,000	1.6%	
REVENUES					
Fees & Service Charges	(2,521,300)	(2,521,300)	0	0.0%	
TOTAL REVENUES	(2,521,300)	(2,521,300)	0	0.0%	
NET PROGRAM IMPACT	4,550,200	4,665,200	115,000	2.5%	

Roads, Storm Drainage & Watercourses

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2009 Explanation of Budget Changes

Program: Cleaning and Litter Pickup

Description of Program

Removal of leaves, litter and debris from City streets, cleaning of sidewalks on an as required basis in commercial areas, cleaning of walkways joining adjacent streets, cleaning of storm sewer inlets and outlets, storm sewer flushing, storm sewer inspection, and catchbasin cleaning.

	2008 Restated Budget	2009 Requested Budget	Change in 2009 Requested Budget To 2008 Restated Budget		Explanation
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	3,110,600	3,336,600	226,000	7.3%	- The increase in permanent labour costs reflects performance pay and economic adjustment increases, labour adjustments and other fringe benefit changes.
Transportation Costs	68,800	68,800	0	0.0%	
Equipment Costs & Maintenance Agreements	15,400	15,400	0	0.0%	
Materials, Supplies & Other Services	51,000	51,000	0	0.0%	
Finance Other	76,400	76,400	0	0.0%	
OTHER OPERATING EXPENSES	211,600	211,600	0	0.0%	
TOTAL EXPENDITURES	3,322,200	3,548,200	226,000	6.8%	
REVENUES					
Fees & Service Charges	(120,000)	(120,000)	0	0.0%	
Transfers	(3,424,300)	(3,424,300)	0	0.0%	
TOTAL REVENUES	(3,544,300)	(3,544,300)	0	0.0%	
Allocations	9,600	9,600	0	0.0%	
NET PROGRAM IMPACT	(212,500)	13,500	226,000	106.4%	

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2010 EXPLANATION OF BUDGET CHANGES

PROGRAM: CLEANING & LITTER PICKUP

	2009	2010	Change in 2010		Explanation
	Budget	Requested Budget	Requested Budget To 2009 Budget		
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	1,304,300	1,304,300	0	0.0%	
Transportation Costs	538,700	538,700	0	0.0%	
Contractor & Professional Services	2,633,800	2,808,800	175,000	6.6%	Increase attributed to minor service level increases for City cleanliness, such as graffiti removal, street recycling, leaf pickup, spring cleanup and street sweeping.
Advertising & Promotions	22,300	22,300	0	0.0%	
Materials, Supplies & Other Services	94,100	94,100	0	0.0%	
OTHER OPERATING EXPENSES	3,288,900	3,463,900	175,000	5.3%	
TOTAL EXPENDITURES	4,593,200	4,768,200	175,000	3.8%	
REVENUES					
Grants	(920,000)	(920,000)	0	0.0%	
Fees & Service Charges	(107,000)	(107,000)	0	0.0%	
TOTAL REVENUES	(1,027,000)	(1,027,000)	0	0.0%	
NET PROGRAM IMPACT	3,566,200	3,741,200	175,000	4.9%	

Roads, Storm Drainage & Watercourses

2009 & 2010 business plan and budget

2009 Explanation of Budget Changes

Program: Engineering & Capital Works

Description of Program

Design and construction of capital works involving roads, bridges, sidewalks, storm sewers, and major watercourse improvements; and inspection services for departmental projects.

	2008 Restated Budget	2009 Requested Budget	Change in 2009 Requested Budget To 2008 Restated Budget		Explanation
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	3,110,600	3,336,600	226,000	7.3%	- The increase in permanent labour costs reflects adjustments for the following items: - Performance pay and economic adjustment increases, labour adjustments, and other fringe benefit changes. - The budget was decreased by (\$37.6k) related to the realignment of budgets.
Transportation Costs	68,800	68,800	0	0.0%	
Equipment Costs & Maintenance Agreements	15,400	15,400	0	0.0%	
Materials, Supplies & Other Services	51,000	51,000	0	0.0%	
Finance Other	76,400	76,400	0	0.0%	
OTHER OPERATING EXPENSES	211,600	211,600	0	0.0%	
TOTAL EXPENDITURES	3,322,200	3,548,200	226,000	6.8%	
REVENUES					
Fees & Service Charges	(120,000)	(120,000)	0	0.0%	
Transfers	(3,424,300)	(3,424,300)	0	0.0%	
TOTAL REVENUES	(3,544,300)	(3,544,300)	0	0.0%	
Allocations	9,600	9,600	0	0.0%	
NET PROGRAM IMPACT	(212,500)	13,500	226,000	106.4%	

Roads, Storm Drainage & Watercourses

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2010 EXPLANATION OF BUDGET CHANGES

PROGRAM: ENGINEERING & CAPITAL WORKS

	2009	2010	Change in 2010		Explanation
	Budget	Requested Budget	Requested Budget To 2009 Budget		
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	3,336,600	3,336,600	0	0.0%	
Transportation Costs	68,800	68,800	0	0.0%	
Equipment Costs & Maintenance Agreements	15,400	15,400	0	0.0%	
Materials, Supplies & Other Services	51,000	51,000	0	0.0%	
Finance Other	76,400	76,400	0	0.0%	
OTHER OPERATING EXPENSES	211,600	211,600	0	0.0%	
TOTAL EXPENDITURES	3,548,200	3,548,200	0	0.0%	
REVENUES					
Fees & Service Charges	(120,000)	(120,000)	0	0.0%	
Transfers	(3,424,300)	(3,424,300)	0	0.0%	
TOTAL REVENUES	(3,544,300)	(3,544,300)	0	0.0%	
Allocations	9,600	9,600	0	0.0%	
NET PROGRAM IMPACT	13,500	13,500	0	0.0%	

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2009 Explanation of Budget Changes

Program: Development Construction

Description of Program

The focus of this program is on ensuring that the terms of the City's servicing agreements are met on plans of subdivision, and liaison among the City, developers, consulting engineers and homeowners.

	2008 Restated Budget	2009 Requested Budget	Change in 2009 Requested Budget To 2008 Restated Budget		Explanation
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	1,061,400	1,088,600	27,200	2.6%	The increase in permanent labour costs reflects performance pay and economic adjustment increases, labour adjustments and other fringe benefit changes.
Contractor & Professional Services	9,700	9,700	0	0.0%	
OTHER OPERATING EXPENSES	9,700	9,700	0	0.0%	
TOTAL EXPENDITURES	1,071,100	1,098,300	27,200	2.5%	
REVENUES					
Fees & Service Charges	(7,500)	(7,500)	0	0.0%	
TOTAL REVENUES	(7,500)	(7,500)	0	0.0%	
NET PROGRAM IMPACT	1,063,600	1,090,800	27,200	2.6%	

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2010 EXPLANATION OF BUDGET CHANGES PROGRAM: DEVELOPMENT CONSTRUCTION

	2009	2010	Change in 2010		Explanation
	Budget	Requested Budget	Requested Budget To 2009 Budget		
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	1,088,600	1,088,600	0	0.0%	
Contractor & Professional Services	9,700	9,700	0	0.0%	
OTHER OPERATING EXPENSES	9,700	9,700	0	0.0%	
TOTAL EXPENDITURES	1,098,300	1,098,300	0	0.0%	
REVENUES					
Fees & Service Charges	(7,500)	(7,500)	0	0.0%	
TOTAL REVENUES	(7,500)	(7,500)	0	0.0%	
NET PROGRAM IMPACT	1,090,800	1,090,800	0	0.0%	

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2009 Explanation of Budget Changes

Program: Corporate Fleet Maintenance

Description of Program

Service and repair to City vehicles, including fuel.

	2008 Restated Budget	2009 Requested Budget	Change in 2009 Requested Budget To 2008 Restated Budget		Explanation
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	2,181,800	2,295,300	113,500	5.2%	- The increase in permanent labour costs reflects performance pay and economic adjustment increases, labour adjustments and other fringe benefit changes. Also includes one mechanic related to the e3 review.
Transportation Costs	(4,189,500)	(4,164,500)	25,000	0.6%	- The budget increase aligns budget to actual expenditures.
Equipment Costs & Maintenance Agreements	4,500	4,500	0	0.0%	
Materials, Supplies & Other Services	2,774,300	3,001,300	227,000	8.2%	The budget increase consist of the following: - \$260k increase for fuel at the Service Centre. - (\$33k) decrease was implemented based on a recommendation of the e3 Review. These recommendations included a reduction in the materials and supplies including other services.
OTHER OPERATING EXPENSES	(1,410,700)	(1,158,700)	252,000	17.9%	
TOTAL EXPENDITURES	771,100	1,136,600	365,500	47.4%	
REVENUES					
Fees & Service Charges	(55,000)	(55,000)	0	0.0%	
TOTAL REVENUES	(55,000)	(55,000)	0	0.0%	
Allocations	31,100	31,100	0	0.0%	
NET PROGRAM IMPACT	747,200	1,112,700	365,500	48.9%	

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2010 EXPLANATION OF BUDGET CHANGES

PROGRAM: CORPORATE FLEET MAINTENANCE

	2009 Budget	2010 Requested Budget	Change in 2010 Requested Budget To 2009 Budget		Explanation
			\$	%	
EXPENDITURES					
LABOUR COST	2,295,300	2,314,200	18,900	0.8%	- Cost increases for the annualization of one mechanic.
Materials, Supplies & Other Services	3,001,300	3,131,300	130,000	4.3%	- Cost increases for fuel.
OTHER OPERATING EXPENSES	(1,158,700)	(1,028,700)	130,000	11.2%	
TOTAL EXPENDITURES	1,136,600	1,285,500	148,900	13.1%	
REVENUES					
Fees & Service Charges	(55,000)	(55,000)	0	0.0%	
TOTAL REVENUES	(55,000)	(55,000)	0	0.0%	
Allocations	31,100	31,100	0	0.0%	
NET PROGRAM IMPACT	1,112,700	1,261,600	148,900	13.4%	



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2009 Explanation of Budget Changes

Program: Street Lighting

Description of Program

Repair, maintenance and energy costs associated with the City's street lighting system.

	2008 Restated Budget	2009 Requested Budget	Change in 2009 Requested Budget To 2008 Restated Budget		Explanation
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	0	0	0	0.0%	
Occupancy & City Costs	5,673,600	6,925,600	1,252,000	22.1%	- Net cost increase for electricity.
OTHER OPERATING EXPENSES	5,673,600	6,925,600	1,252,000	22.1%	
TOTAL EXPENDITURES	5,673,600	6,925,600	1,252,000	22.1%	
NET PROGRAM IMPACT	5,673,600	6,925,600	1,252,000	22.1%	



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2010 EXPLANATION OF BUDGET CHANGES

PROGRAM: STREET LIGHTING

	2009	2010	Change in 2010		Explanation
	Budget	Requested Budget	Requested Budget	To 2009 Budget	
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	0	0	0	0.0%	
Occupancy & City Costs	6,925,600	7,025,600	100,000	1.4%	- Cost increases for electricity.
OTHER OPERATING EXPENSES	6,925,600	7,025,600	100,000	1.4%	
TOTAL EXPENDITURES	6,925,600	7,025,600	100,000	1.4%	
NET PROGRAM IMPACT	6,925,600	7,025,600	100,000	1.4%	

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2009 Explanation of Budget Changes

Program: Crossing Guards

Description of Program

Recruitment, training, placement and supervision of crossing guards at locations in school zones as approved by the Traffic Safety Council.

	2008 Restated Budget	2009 Requested Budget	Change in 2009 Requested Budget To 2008 Restated Budget		Explanation
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	2,070,900	2,201,900	131,000	6.3%	- The increase in permanent labour costs reflects performance pay and economic adjustment increases, labour adjustments and other fringe benefit changes.
Communication Costs	1,700	1,700	0	0.0%	
Transportation Costs	120,100	140,100	20,000	16.7%	- The budget increase relates to contractual growth for mileage related to crossing guards.
Materials, Supplies & Other Services	24,900	44,900	20,000	80.3%	- The budget increase relates to contractual growth for crossing guards personal equipment.
OTHER OPERATING EXPENSES	146,700	186,700	40,000	27.3%	
TOTAL EXPENDITURES	2,217,600	2,388,600	171,000	7.7%	
NET PROGRAM IMPACT	2,217,600	2,388,600	171,000	7.7%	



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2010 EXPLANATION OF BUDGET CHANGES

PROGRAM: CROSSING GUARDS

	2009	2010	Change in 2010		Explanation
	Budget	Requested Budget	Requested Budget	To 2009 Budget	
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	2,201,900	2,201,900	0	0.0%	
Communication Costs	1,700	1,700	0	0.0%	
Transportation Costs	140,100	140,100	0	0.0%	
Materials, Supplies & Other Services	44,900	44,900	0	0.0%	
OTHER OPERATING EXPENSES	186,700	186,700	0	0.0%	
TOTAL EXPENDITURES	2,388,600	2,388,600	0	0.0%	
NET PROGRAM IMPACT	2,388,600	2,388,600	0	0.0%	

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2009 Explanation of Budget Changes

Program: Traffic Management

Description of Program

Engineering, operation and maintenance of the City's traffic signal network and traffic data collection, installation and maintenance of pavement lane line markings and special markings, repair and collection of revenues from parking meters and the manufacture, supply and installation of traffic signs and street name signs.

	2008 Restated Budget	2009 Requested Budget	Change in 2009 Requested Budget To 2008 Restated Budget		Explanation
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	3,730,300	3,922,000	191,700	5.1%	The increase in permanent labour costs reflects performance pay and economic adjustment increases, labour adjustments and other fringe benefit changes. Also includes annualization for the Parking Machine Collection position, Pay for Parking Coordinator position and the Traffic Operations Technologist position.
Communication Costs	447,700	522,700	75,000	16.8%	- The budget increase relates to the Traffic Signal Line Rental.
Transportation Costs	92,700	92,700	0	0.0%	
Occupancy & City Costs	172,100	138,400	(33,700)	-19.6%	- The net budget decrease relates to electricity costs.
Contractor & Professional Services	3,700,100	4,007,100	307,000	8.3%	The budget increase of \$307k relates to the following: - \$100k increase relates to the Traffic Data Count Program. -\$250k increase for Traffic signal maintenance contract agreement. - \$37k increase relates to the Traffic system maintenance. - (\$100k) decrease for Special Paving Markings.
Advertising & Promotions	1,000	1,000	0	0.0%	

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2009 EXPLANATION OF BUDGET CHANGES

PROGRAM: TRAFFIC MANAGEMENT

	2008	2009	Change in 2009		Explanation
	Restated Budget	Requested Budget	Requested Budget To 2008 Restated Budget		
	\$	\$	\$	%	
Materials, Supplies & Other Services	484,600	534,600	50,000	10.3%	-Cost increase for sign marking new/replacement and Data equipment maintenance.
Finance Other	70,000	0	(70,000)	-100.0%	- The City Centre Parking Strategy Pay and Display loan setup.
Transfers	31,600	251,800	220,200	696.8%	- The City Centre Parking Strategy Pay and Display loan setup.
Debt	0	0	0	0.0%	
OTHER OPERATING EXPENSES	4,999,800	5,548,300	548,500	11.0%	
TOTAL EXPENDITURES	8,730,100	9,470,300	740,200	8.5%	
REVENUES					
Fees & Service Charges	(1,355,000)	(1,355,000)	0	0.0%	
Licenses & Permits	(55,000)	(55,000)	0	0.0%	
TOTAL REVENUES	(1,410,000)	(1,410,000)	0	0.0%	
Allocations	9,700	84,700	75,000	773.2%	- The budget was increased for Information Technology (IT) Maintenance costs which are allocated to other services areas within the City.
NET PROGRAM IMPACT	7,329,800	8,145,000	815,200	11.1%	

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2010 EXPLANATION OF BUDGET CHANGES

PROGRAM: TRAFFIC MANAGEMENT

	2009	2010	Change in 2010		Explanation
	Budget	Requested Budget	Requested Budget To 2009 Budget		
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	3,922,000	3,922,000	0	0.0%	
Staff Development Costs	0	0	0	0.0%	
Communication Costs	522,700	537,700	15,000	2.9%	- Cost increases relate to traffic signal line rentals.
Transportation Costs	92,700	92,700	0	0.0%	
Occupancy & City Costs	138,400	138,400	0	0.0%	
Contractor & Professional Services	4,007,100	4,134,100	127,000	3.2%	- Cost increases for special markings, traffic data count program, traffic signal maintenance and traffic system maintenance.
Advertising & Promotions	1,000	1,000	0	0.0%	
Materials, Supplies & Other Services	534,600	539,600	5,000	0.9%	- Cost increases for data equipment maintenance.
Transfers	251,800	251,800	0	0.0%	
Debt	0	0	0	0.0%	
OTHER OPERATING EXPENSES	5,548,300	5,695,300	147,000	2.6%	
TOTAL EXPENDITURES	9,470,300	9,617,300	147,000	1.6%	
REVENUES					
Fees & Service Charges	(1,355,000)	(1,355,000)	0	0.0%	
Licenses & Permits	(55,000)	(55,000)	0	0.0%	
TOTAL REVENUES	(1,410,000)	(1,410,000)	0	0.0%	
Allocations	84,700	84,700	0	0.0%	
NET PROGRAM IMPACT	8,145,000	8,292,000	147,000	1.8%	

Roads, Storm Drainage & Watercourses

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2009 Explanation of Budget Changes

Program: Transportation & Infrastructure Planning

Description of Program

This division is responsible for infrastructure and transportation planning and development engineering.

	2008 Restated Budget	2009 Requested Budget	Change in 2009 Requested Budget To 2008 Restated Budget		Explanation
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	3,844,900	4,042,500	197,600	5.1%	- The increase in permanent labour costs reflects performance pay and economic adjustment increases, labour adjustments and other fringe benefit changes. Also includes the annualization of the Transportation Engineer position and the Storm Drainage Technologist position.
Staff Development Costs	34,400	31,400	(3,000)	-8.7%	
Communication Costs	11,600	11,600	0	0.0%	
Transportation Costs	28,400	28,400	0	0.0%	
Occupancy & City Costs	500	500	0	0.0%	
Equipment Costs & Maintenance Agreements	20,000	20,000	0	0.0%	

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2009 EXPLANATION OF BUDGET CHANGES

PROGRAM: TRANSPORTATION & INFRASTRUCTURE PLANNING

	2008 Restated Budget	2009 Requested Budget	Change in 2009 Requested Budget To 2008 Restated Budget		Explanation
			\$	%	
Contractor & Professional Services	\$ 384,300	\$ 559,300	\$ 175,000	45.5%	- Cost increases are attributed to the following : - \$100 K increase for the Engineering/Traffic Studies related to development applications and district plan reviews. - \$75K increase for Environmental Management of City Owned Sites.
Advertising & Promotions	7,900	7,900	0	0.0%	
Materials, Supplies & Other Services	35,800	35,800	0	0.0%	
OTHER OPERATING EXPENSES	522,900	694,900	172,000	32.9%	
TOTAL EXPENDITURES	4,367,800	4,737,400	369,600	8.5%	
REVENUES					
Fees & Service Charges	(499,200)	(1,010,900)	(511,700)	-102.5%	-The budget was decreased by (\$100k) for Development Engineering Fees. -The budget was increased by \$612k related to the implementation of full cost recovery model for Planning Fees.
Licenses & Permits	(55,000)	(55,000)	0	0.0%	
TOTAL REVENUES	(554,200)	(1,065,900)	(511,700)	-92.3%	
NET PROGRAM IMPACT	3,813,600	3,671,500	(142,100)	-3.7%	

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2010 EXPLANATION OF BUDGET CHANGES

PROGRAM: TRANSPORTATION & INFRASTRUCTURE PLANNING

	2009 Budget	2010 Requested Budget	Change in 2010 Requested Budget To 2009 Budget		Explanation
	\$	\$	\$	%	
EXPENDITURES					
LABOUR COST	4,042,500	4,042,500	0	0.0%	
Staff Development Costs	31,400	31,400	0	0.0%	
Communication Costs	11,600	11,600	0	0.0%	
Transportation Costs	28,400	28,400	0	0.0%	
Occupancy & City Costs	500	500	0	0.0%	
Equipment Costs & Maintenance Agreements	20,000	20,000	0	0.0%	
Contractor & Professional Services	559,300	709,300	150,000	26.8%	Cost increases are attributed to the following: - \$100k increase for engineering/traffic studies. - \$50k increase for the Environmental Management of City-Owned Sites.
Advertising & Promotions	7,900	7,900	0	0.0%	
Materials, Supplies & Other Services	35,800	35,800	0	0.0%	
OTHER OPERATING EXPENSES	694,900	844,900	150,000	21.6%	
TOTAL EXPENDITURES	4,737,400	4,887,400	150,000	3.2%	
REVENUES					
Fees & Service Charges	(1,010,900)	(1,230,300)	(219,400)	-21.7%	-The budget was decreased by (\$100k) for Development Engineering Fees. -The budget was increased by \$319k related to the implementation of full cost recovery model for Planning Fees.
Licenses & Permits	(55,000)	(55,000)	0	0.0%	
TOTAL REVENUES	(1,065,900)	(1,285,300)	(219,400)	-20.6%	
NET PROGRAM IMPACT	3,671,500	3,602,100	(69,400)	-1.9%	

Roads, Storm Drainage & Watercourses

2009 & 2010 business plan and budget

2009 Summary of Program Directions Roads, Storm Drainage & Watercourses

Program Additions / New Staff (+)

Description	FTE	Expenditure	Revenue	Net	Start Date	Briefing Note or Budget Book Page Reference
Environmental Management of City-Owned Sites		75,000	-	75,000	January 1, 2009	H-31
e3 Review - Corporate Fleet Service Centre	1	103,100	-	103,100	April 1, 2009	H-94
Streetlighting Review Implementation		243,800	-	243,800	January 1, 2009	H-95
Automated Vehicle Locator		25,000	-	25,000	January 1, 2009	H-96
Street Cleanliness		100,000	-	100,000	January 1, 2009	H-97
Winter Maintenance Service Levels		700,000	-	700,000	January 1, 2009	H-98
Total Division/Service Base Budget Impacts	1	1,246,900	-	1,246,900		

New Revenues (-)

Description	FTE	Expenditure	Revenue	Net	Start Date	Briefing Note or Budget Book Page Reference
Planning Application Fee Increases		-	(159,700)	(159,700)	January 1, 2009	H-99
Total Division/Service Base Budget Impacts	0	-	(159,700)	(159,700)		

Roads, Storm Drainage & Watercourses

2009 & 2010 business plan and budget

2009 Summary of Program Directions Roads, Storm Drainage & Watercourses

Program Reductions (-)

Description	FTE	Expenditure	Revenue	Net	Start Date	Briefing Note or Budget Book Page Reference
Elimination of 2 City Vehicles and Increasing Contracted Services	-4	(200,000)	-	(200,000)	January 1, 2009	H-100
Reduce Permanent Sidewalk Repair Funding by 50%		(250,000)	-	(250,000)	January 1, 2009	H-101
Reduce Regular Sweeping Program by 50%		(75,000)	-	(75,000)	January 1, 2009	H-102
Reduce Special Pavement Marking Program by \$100K		(100,000)	-	(100,000)	January 1, 2009	H-103
Asphalt Maintenance Repairs - Miscellaneous Reductions		(100,000)	-	(100,000)	January 1, 2009	H-104
Storm Drainage Maintenance and Repairs - Miscellaneous Reductions		(100,000)	-	(100,000)	January 1, 2009	H-105
Reduce Spending on Staff Courses and Conferences		(8,800)	-	(8,800)	January 1, 2009	H-106
Total Division/Service Base Budget Impacts	-4	(833,800)	-	(833,800)		

Efficiencies / Reserve Transfers (+) or (-)

Description	FTE	Expenditure	Revenue	Net	Start Date	Briefing Note or Budget Book Page Reference
e3 Review - Corporate Fleet Service Centre	1	(154,500)	-	(154,500)	April 1, 2009	H-94
Utility Cost Decreases - Electricity and Natural Gas		(8,200)	-	(8,200)	January 1, 2009	H-107
Streetlighting Review Implementation	0	(391,800)	-	(391,800)	January 1, 2009	H-95
Total Division/Service Base Budget Impacts	1	(554,500)	-	(554,500)		

Roads, Storm Drainage & Watercourses

2009 & 2010 business plan and budget

2009 Service Change

e3 Review - Corporate Fleet Service Centre

Service: Roads, Storm Drainage & Watercourses **Type of Change:** Program Additions or New Staff & Efficiencies

Strategic Pillar: **Division:** Engineering & Works

Effective Date: April 1, 2009

Financial Impact	2008 Budget	2009 Change	2010 Change	2011 Change
Labour	\$1,355,800	\$56,600	\$18,900	
Operating Expenses	1,664,900	(108,000)		
Revenue				
Net Cost	\$3,020,700	(\$51,400)	\$18,900	\$0
FTE		1		

FTE:

Permanent

Temporary

Details of Service Change

An e3 Review was conducted for the Corporate Fleet Service Centre in 2008 which resulted in various recommendations. The effects of recommendations made through this report on the operating budget are as follows:

- The addition of one Mechanic to start April 1, 2009
- The reduction of \$154,500 from the sublet budget account
- The increase of \$46,500 to the purchase for resale of parts budget account

Service Impact

The review has developed strategies which are expected to result in the minimization or elimination of performance gaps and allow operations to perform at its optimal level of efficiency, effectiveness and economy for both short term savings and to maintain a long term path of continuous improvement.

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

2009 Service Change Streetlighting Review Implementation

Service: Roads, Storm Drainage & Watercourses **Type of Change:** Program Additions or New Staff

Strategic Pillar: **Division:** Engineering & Works

Effective Date: January 1, 2009

Financial Impact	2008 Budget	2009 Change	2010 Change	2011 Change
Labour				
Operating Expenses	2,438,000	(148,000)		
Revenue				
Net Cost	\$2,438,000	(\$148,000)	\$0	\$0
FTE				

FTE:

Permanent
Temporary

Details of Service Change

Cost increases related to the 2009 streetlighting maintenance contract with Enersource were initially estimated to be 10%, or \$243,800, based on increased fuel and material costs. As a result of negotiations with Enersource, the 2009 contract, which was approved at the November 26, 2008 Council Meeting has been valued at \$2,200,000. Additional costs of \$90,000 will be incurred related to night patrol & for work outside the maintenance agreement. The total budget required for 2009 will be \$2,290,000 which will result in savings of \$391,800 from the proposed 2009 budget of \$2,681,800.

Service Impact

No impact to service levels is expected.

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

2009 Service Change Automated Vehicle Locator

Service: Roads, Storm Drainage & Watercourses **Type of Change:** Program Additions or New Staff
Strategic Pillar: **Division:** Engineering & Works

Effective Date: January 1, 2009

Financial Impact	2008 Budget	2009 Change	2010 Change	2011 Change
Labour				
Operating Expenses	1,440,000	25,000		
Revenue				
Net Cost	\$1,440,000	\$25,000	\$0	\$0
FTE				

FTE:

Permanent
Temporary

Details of Service Change

GPS and real time information / archive of information is necessary to comply with the O. Reg 239 and the City's Salt Management Plan. Currently this information is available largely through a manual intensive process and is time consuming to retrieve and analyze information. GPS real time information will also assist in maintaining and improving customer service by providing current and exact information regarding issues of when and what services were provided at specific locations, for example winter operations. Real time tracking will also be used as a management tool to monitor and improve fleet utilization for day to day operations. Currently, exact locations cannot be tracked and confirmation on whether or not a service vehicle actually provided services at a specific location cannot be confirmed. The City's service centre and City vehicle usage is being reviewed by the E3 team, which could recommend that GPS be installed on all City vehicles.

Service Impact

Improved information accessibility and monitoring of all service vehicles and permanent record of patrolling .

Roads, Storm Drainage & Watercourses

2009 & 2010 business plan and budget

2009 Service Change Street Cleanliness

Service: Roads, Storm Drainage & Watercourses **Type of Change:** Program Additions or New Staff

Strategic Pillar: **Division:** Engineering & Works

Effective Date: January 1, 2009

Financial Impact	2008 Budget	2009 Change	2010 Change	2011 Change
Labour				
Operating Expenses	1,143,800	100,000		
Revenue				
Net Cost	\$1,143,800	\$100,000	\$0	\$0
FTE				

FTE:

Permanent
Temporary

Details of Service Change

Deliverables include addressing the pressures placed on existing programs as the City matures and increases density. These programs include graffiti clean up, leaf pick up, litter pick up, spring clean up, on street recycling, street sweeping program, indiscriminate dumping clean up, waste bin pick up, inlet and outlet cleaning.

Service Impact

Maintain current levels.

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

2009 Service Change Planning Application Fee Increases

Service: Roads, Storm Drainage & Watercourses Type of Change: New Revenues
 Strategic Pillar: Division: Transportation & Infrastructure Planning Effective Date: January 1, 2009

Financial Impact	2008 Budget	2009 Change	2010 Change	2011 Change
Labour				
Operating Expenses				
Revenue		(159,700)		
Net Cost	\$0	(\$159,700)	\$0	\$0
FTE				

FTE:
 Permanent
 Temporary

Details of Service Change
 The Planning and Building Department will be making changes to the structure and rate of fees charged to developers for the development approvals process in order to reflect full cost or close to full cost recovery through increased revenues. These increased fees are then distributed to other departments in recognition of contribution to the planning application process as part of the direct cost allocation program.

Service Impact
 No impact to service levels is expected.

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

2009 Service Change

Elimination of 2 City Vehicles and Increasing Contracted Services

Service: Roads, Storm Drainage & Watercourses
 Type of Change: Program Reductions
 Strategic Pillar:
 Division: Engineering & Works

Effective Date: January 1, 2009

Financial Impact	2008 Budget	2009 Change	2010 Change	2011 Change
Labour	\$20,106,900	(\$213,000)		
Operating Expenses	35,501,100	13,000		
Revenue				
Net Cost	\$55,608,000	(\$200,000)	\$0	\$0
FTE		-4		

FTE:

Permanent
 Temporary

X

Details of Service Change

Elimination of 2 trucks would reduce maintenance staff requirements. The savings from reductions in labour and truck maintenance costs would be partially offset by an increase in the cost of contracted services.

Service Impact

No impact to service levels is expected.

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

2009 Service Change

Reduce Permanent Sidewalk Repair Funding by 50%

Service: Roads, Storm Drainage & Watercourses
 Type of Change: Program Reductions
 Strategic Pillar:
 Division: Engineering & Works

Effective Date: January 1, 2009

Financial Impact	2008 Budget	2009 Change	2010 Change	2011 Change
Labour				
Operating Expenses	950,000	(250,000)		
Revenue				
Net Cost	\$950,000	(\$250,000)	\$0	\$0
FTE				

FTE:

Permanent
 Temporary

Details of Service Change

Some temporary repairs to be made using asphalt or grinding. Permanent repairs to these locations would not be made until major rehabilitation work is scheduled. The 2008 budget for permanent sidewalk repairs is \$500,000.

Service Impact

Aesthetics of repairs will not be visually appealing.

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

2009 Service Change

Reduce Regular Sweeping Program by 50%

Service: Roads, Storm Drainage & Watercourses
 Type of Change: Program Reductions
 Strategic Pillar:
 Division: Engineering & Works

Effective Date: January 1, 2009

Financial Impact	2008 Budget	2009 Change	2010 Change	2011 Change
Labour				
Operating Expenses	533,000	(75,000)		
Revenue				
Net Cost	\$533,000	(\$75,000)	\$0	\$0
FTE				

FTE:

Permanent
 Temporary

<input type="checkbox"/>
<input type="checkbox"/>

Details of Service Change

Reduction of regular sweeping program by 50% (excluding spring and emergency clean-up). Current level of service for sweeping is: business districts/BIAs - weekly, arterial roads - twice a month, industrial roads - once a month - all from June to October. Reduced level of service would be: business districts/BIAs - bi-weekly, arterial roads - once a month, industrial roads - bi-monthly, all from June to October.

Service Impact

Increased levels of debris would negatively impact City's image. Increase in complaints.

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

2009 Service Change

Reduce Special Pavement Marking Program by \$100K

Service: Roads, Storm Drainage & Watercourses
 Type of Change: Program Reductions
 Strategic Pillar:
 Division: Engineering & Works

Effective Date: January 1, 2009

Financial Impact	2008 Budget	2009 Change	2010 Change	2011 Change
Labour				
Operating Expenses		(100,000)		
Revenue				
Net Cost	\$0	(\$100,000)	\$0	\$0
FTE				

FTE:

Permanent
 Temporary

<input type="checkbox"/>
<input type="checkbox"/>

Details of Service Change

Reduction in funding would slow the enhanced pavement-marking program. The 2008 budget for zebra-stripping at intersections and new bike lanes is approximately \$200,000.

Service Impact

Less funding would be available for expanding zebra stripping at intersections and for new bike lanes. Could also delay some bike facility installations.

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

2009 Service Change

Asphalt Maintenance Repairs - Miscellaneous Reductions

Service: Roads, Storm Drainage & Watercourses **Type of Change:** Program Reductions

Strategic Pillar: **Division:** Engineering & Works

Effective Date: January 1, 2009

Financial Impact	2008 Budget	2009 Change	2010 Change	2011 Change
Labour				
Operating Expenses	1,450,000	(100,000)		
Revenue				
Net Cost	\$1,450,000	(\$100,000)	\$0	\$0
FTE				

FTE:

Permanent
Temporary

Details of Service Change

Reduction in the amount of scheduled maintenance. The 2008 asphalt repairs budget is \$1.45 million for the contract portion of the program.

Service Impact

Accelerated deterioration of pavement structure and increase in public complaints.

Roads, Storm Drainage & Watercourses

2009 & 2010 business plan and budget

2009 Service Change

Storm Drainage Maintenance and Repairs - Miscellaneous Reductions

Service: Roads, Storm Drainage & Watercourses **Type of Change:** Program Reductions

Strategic Pillar: **Division:** Engineering & Works

Effective Date: January 1, 2009

Financial Impact	2008 Budget	2009 Change	2010 Change	2011 Change
Labour				
Operating Expenses	300,000	(100,000)		
Revenue				
Net Cost	\$300,000	(\$100,000)	\$0	\$0
FTE				

FTE:

Permanent
Temporary

Details of Service Change

Less frequent removal and cleaning of accumulated sediments from watercourses and channels, reduction in the amount of maintenance of erosion protection works (i.e. gabions, armour stone, etc.) and reduced catch basin repair. The 2008 budget is \$600,000 for the contract portion of the program.

Service Impact

Potential increase in ditch drainage and/or ponding problems, localized flooding and deferral of erosion repair works. Increased public complaints.

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

2009 Service Change

Reduce Spending on Staff Courses and Conferences

Service: Roads, Storm Drainage & Watercourses
 Type of Change: Program Reductions
 Strategic Pillar:
 Division: Engineering & Works

Effective Date: January 1, 2009

Financial Impact	2008 Budget	2009 Change	2010 Change	2011 Change
Labour				
Operating Expenses	77,800	(8,800)		
Revenue				
Net Cost	\$77,800	(\$8,800)	\$0	\$0
FTE				

FTE:

Permanent
 Temporary

<input type="checkbox"/>
<input type="checkbox"/>

Details of Service Change

Cut the staff courses and conferences budgets by 25% across the City. Reduce average funding from \$325 per employee to \$260 per employee. Staff will continue to closely monitor and restrict out of province travel to ensure that it is kept to the absolute minimum.

Service Impact

Courses and conferences are a tool to ensure that city staff have up to date information and training to conduct their day to day work. It also provides a medium for information sharing and networking. By restricting courses and conferences, these benefits will also be reduced.

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

2009 Service Change

Utility Cost Decreases - Electricity and Natural Gas

Service: Roads, Storm Drainage & Watercourses **Type of Change:** Efficiencies / Reserve Transfers

Strategic Pillar: **Division:** Engineering & Works

Effective Date: January 1, 2009

Financial Impact	2008 Budget	2009 Change	2010 Change	2011 Change
Labour				
Operating Expenses	3,784,700	(8,200)		
Revenue				
Net Cost	\$3,784,700	(\$8,200)	\$0	\$0
FTE				

FTE:

Permanent
Temporary

Details of Service Change

The Facilities & Property Management Division of the Corporate Services Department has projected savings in utilities costs from the open market purchase plan and energy retrofit initiatives. These savings are then distributed to other departments as part of the direct cost allocation program.

Service Impact

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

2010 Summary of Program Directions Roads, Storm Drainage & Watercourses

Program Additions / New Staff (+)

Description	FTE	Expenditure	Revenue	Net	Start Date	Briefing Note or Budget Book Page Reference
Environmental Management of City-Owned Sites		50,000	-	50,000	January 1, 2010	H-31
e3 Review - Corporate Fleet Service Centre		18,900	-	18,900	January 1, 2010	H-109
Automated Vehicle Locator		25,000	-	25,000	January 1, 2010	H-110
Street Cleanliness		100,000	-	100,000	January 1, 2010	H-111
Winter Maintenance Service Levels		1,300,000	-	1,300,000	January 1, 2010	H-112
Total Division/Service Base Budget Impacts	0	1,493,900	-	1,493,900		

New Revenues (-)

Description	FTE	Expenditure	Revenue	Net	Start Date	Briefing Note or Budget Book Page Reference
Planning Application Fee Increases		-	(319,400)	(319,400)	January 1, 2010	L-31 & H-113
Total Division/Service Base Budget Impacts	0	-	(319,400)	(319,400)		

Efficiencies / Reserve Transfers (+) or (-)

Description	FTE	Expenditure	Revenue	Net	Start Date	Briefing Note or Budget Book Page Reference
Utility Cost Decreases - Electricity and Natural Gas		(3,400)	-	(3,400)	January 1, 2010	H-114
Total Division/Service Base Budget Impacts	0	(3,400)	-	(3,400)		

Roads, Storm Drainage & Watercourses

2009 & 2010 business plan and budget

2010 Service Change

Automated Vehicle Locator

Service: Roads, Storm Drainage & Watercourses **Type of Change:** Program Additions or New Staff & Efficiencies

Strategic Pillar: **Division:** Engineering & Works

Effective Date: January 1, 2010

Financial Impact	2008	2009 Budget	2010 Change	2011 Change
Labour				
Operating Expenses		1,465,000	25,000	
Revenue				
Net Cost		\$1,465,000	\$25,000	\$0
FTE				

FTE:

Permanent
Temporary

Details of Service Change

GPS and real time information / archive of information is necessary to comply with the O. Reg 239 and the City's Salt Management Plan. Currently this information is available largely through a manual intensive process and is time consuming to retrieve and analyze information. GPS real time information will also assist in maintaining and improving customer service by providing current and exact information regarding issues of when and what services were provided at specific locations, for example winter operations. Real time tracking will also be used as a management tool to monitor and improve fleet utilization for day to day operations. Currently, exact locations cannot be tracked and confirmation on whether or not a service vehicle actually provided services at a specific location cannot be confirmed. The City's service centre and City vehicle usage is being reviewed by the E3 team, which could recommend that GPS be installed on all City vehicles.

Service Impact

Improved information accessibility and monitoring of all service vehicles and permanent record of patrolling .

Roads, Storm Drainage & Watercourses

2009 & 2010 business plan and budget

2010 Service Change

Winter Maintenance Service Levels

Service: Roads, Storm Drainage & Watercourses

Type of Change: Program Additions or New Staff & Efficiencies

Strategic Pillar:

Division: Engineering & Works

Effective Date: January 1, 2010

Financial Impact	2008	2009 Budget	2010 Change	2011 Change
Labour				
Operating Expenses		8,056,300	1,300,000	
Revenue				
Net Cost		\$8,056,300	\$1,300,000	\$0
FTE				

FTE:

Permanent
Temporary

Details of Service Change

As a result of the severe winter last year, a number of operations within the winter maintenance service areas were identified for review and to increase the current level of service provided. This increase provides funding to continue with the improvements introduced in late 2009 to the sidewalk and bus stop winter maintenance service levels provided by the City.

Service Impact

Increased levels of winter maintenance.

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

2010 Service Change Planning Application Fee Increases

Service: Roads, Storm Drainage & Watercourses Type of Change: New Revenues
 Strategic Pillar: Division: Transportation & Infrastructure Planning Effective Date: January 1, 2010

Financial Impact	2008	2009 Budget	2010 Change	2011 Change
Labour				
Operating Expenses				
Revenue			(319,400)	
Net Cost	\$0	\$0	(319,400)	\$0
FTE				

FTE:
 Permanent
 Temporary

Details of Service Change
 The Planning and Building Department will be making changes to the structure and rate of fees charged to developers for the development approvals process in order to reflect full cost or close to full cost recovery through increased revenues. These increased fees are then distributed to other departments in recognition of contribution to the planning application process as part of the direct cost allocation program.

Service Impact
 No impact to service levels is expected.

Roads, Storm Drainage & Watercourses

2009 & 2010 business plan and budget

2010 Service Change

Utility Cost Decreases - Electricity and Natural Gas

Service: Roads, Storm Drainage & Watercourses **Type of Change:** Efficiencies / Reserve Transfers

Strategic Pillar: **Division:** Engineering & Works

Effective Date: January 1, 2010

Financial Impact	2008	2009 Budget	2010 Change	2011 Change
Labour				
Operating Expenses		5,140,600	(3,400)	
Revenue				
Net Cost	\$0	\$5,140,600	(3,400)	\$0
FTE				

FTE:

Permanent
Temporary

Details of Service Change

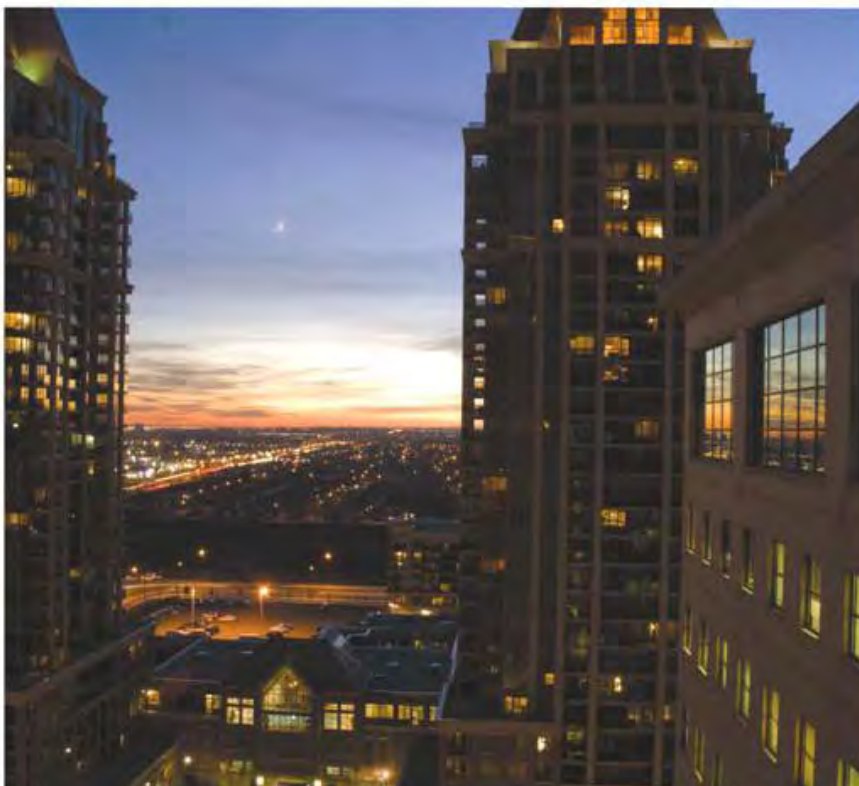
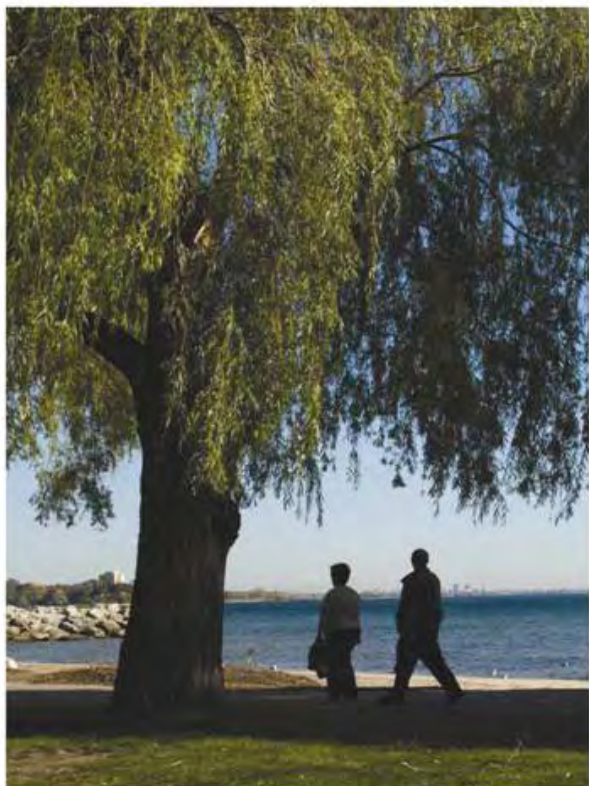
The Facilities & Property Management Division of the Corporate Services Department has projected savings in utilities costs from the open market purchase plan and energy retrofit initiatives. These savings are then distributed to other departments as part of the direct cost allocation program.

Service Impact

No impact to service levels is expected.

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget



Capital



Roads, Storm Drainage & Watercourses



2009&2010businessplanandbudget

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

**Roads, Storm Drainage and Watercourses
2009 - 2018 Net Capital Expenditures By Program
(000's)**

Roads, Storm Drainage and Watercourses	2009 Budget	2010 Budget	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Bridge and Structure Rehabilitation	5,050	2,125	2,325	2,125	2,125	2,125	1,725	1,325	1,325	1,850	22,100
Major Roads	27,503	29,959	22,567	8,606	3,950	15,435	5,260	2,375	9,653	1,480	126,788
Other Engineering	23,059	11,450	10,654	8,549	10,600	8,601	7,889	6,039	6,984	6,255	100,080
Roadway Rehabilitation	21,800	21,250	21,100	22,750	23,600	23,650	24,200	23,650	23,600	24,250	229,850
Storm Drainage	5,600	6,560	6,390	5,800	3,620	7,390	11,190	6,740	9,700	14,040	77,030
Total Net Expenditures	83,012	71,344	63,036	47,830	43,895	57,201	50,264	40,129	51,262	47,875	555,848

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

2009 - 2018 Net Capital Expenditures by Program and Sub-Program (000's)

Description of Program

Bridges and Culverts Rehabilitation

The Bridges and Culverts rehabilitation program detail is prepared based on the results of the condition surveys. These surveys provide a detailed assessment of the structural repairs required to prepare contract documents and specifications. The bridges and culverts shown on the following pages are scheduled for repair between 2009 and 2018 in order to extend the life of the structure through proper maintenance strategies. The studies undertaken have identified the need for these rehabilitation works.

Bridges & Structure Rehabilitation	2009 Budget	2010 Budget	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Bridge and Structure Rehabilitation	4,723	650	350	0	0	0	0	0	0	0	5,723
Bridge Repairs	202	1,350	1,650	2,000	2,000	2,000	1,400	1,200	1,200	1,725	14,727
Bridge and Culvert Appraisal & Improvement Priority	0	0	200	0	0	0	200	0	0	0	400
Inspection & Design	125	125	125	125	125	125	125	125	125	125	1,250
Total Net Expenditures	5,050	2,125	2,325	2,125	2,125	2,125	1,725	1,325	1,325	1,850	22,100

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

Project Listing

Program: Bridge and Structure Rehabilitation

Bridge & Structure Rehabilitation

Year	Project	Pavement	Deck	Girders	Sub Structure	Expansion Joints	Sidewalk	Handrail	Other	Net Cost ('000's)
2009	The Collegeway, 0.01km West of Mississauga Road.	X	X	X	X	X	X	X	X	1,177
2009	Thomas Street, 0.33km West of Mississauga Road			X			X		X	268
2009	Goreway Drive, 0.07 km North of Derry Road				X		X	X	X	300
2009	Truscott Drive, 0.55km West of Southdown Road				X		X	X	X	215
2009	Mavis Road over Fletchers Creek, North of Highway 401	X					X	X	X	963
2009	Transit Cooksville GO Pedestrian Overpass	X	X	X	X	X			X	1,800
2010	Hurontario Street, 0.30 km South of Highway 403	X		X	X	X	X	X	X	650
2011	Burnhamthorpe Road East Bridge over Little Etobicoke Creek	X		X	X	X	X	X	X	350
Total										5,723

Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

Project Listing

Program: Bridge and Structure Rehabilitation

Bridge Repairs

Year	Project	Description	Net Cost ('000's)
2009	Bridge Repairs	Funding for bridge repairs that are determined during the yearly appraisal	202
2010	Bridge Repairs	Funding for bridge repairs that are determined during the yearly appraisal	1,350
2011	Bridge Repairs	Funding for bridge repairs that are determined during the yearly appraisal	1,650
2012	Bridge Repairs	Funding for bridge repairs that are determined during the yearly appraisal	2,000
2013	Bridge Repairs	Funding for bridge repairs that are determined during the yearly appraisal	2,000
2014	Bridge Repairs	Funding for bridge repairs that are determined during the yearly appraisal	2,000
2015	Bridge Repairs	Funding for bridge repairs that are determined during the yearly appraisal	1,400
2016	Bridge Repairs	Funding for bridge repairs that are determined during the yearly appraisal	1,200
2017	Bridge Repairs	Funding for bridge repairs that are determined during the yearly appraisal	1,200



Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

Project Listing

Program: Bridge and Structure Rehabilitation

Bridge Repairs

Year	Project	Description	Net Cost ('000's)
2018	Bridge Repairs	Funding for bridge repairs that are determined during the yearly appraisal	1,725
Total			14,727

Bridge/Culvert Appraisal & Improvement Priority

Year	Project	Description	Net Cost ('000's)
2011	Bridge/Culvert Appraisal & Improvement Priority	Funding for bridge repairs that are determined during the yearly appraisal	200
2015	Bridge/Culvert Appraisal & Improvement Priority	Funding for bridge repairs that are determined during the yearly appraisal	200
Total			400



Roads, Storm Drainage & Watercourses

2009&2010businessplanandbudget

Project Listing

Program: Bridge and Structure Rehabilitation

Inspection & Design

Year	Project	Description	Net Cost ('000's)
2009	Inspection & Design	Design and inspection costs to carry out the required bridge repairs	125
2010	Inspection & Design	Design and inspection costs to carry out the required bridge repairs	125
2011	Inspection & Design	Design and inspection costs to carry out the required bridge repairs	125
2012 - 2018	Inspection & Design	Design and inspection costs to carry out the required bridge repairs	875
Total			1,250

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2009 - 2018 Net Capital Expenditures by Program and Sub-Program (000's)

Description of Program

Major Roads

This program focuses on upgrading and widening arterial/collector roads to city standards. The proposed works are required in order to handle traffic volume increases resulting from City growth on these routes and to correct structural and surface deficiencies.

Major Roads	2009 Budget	2010 Budget	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Grade Separation	11,425	8,450	0	850	0	7,161	0	0	0	0	27,886
Intersection Improvements	1,380	1,380	1,380	1,380	1,380	1,380	1,380	1,380	1,380	1,380	13,800
Road Improvements	14,698	20,129	21,187	6,376	2,570	6,894	3,880	995	8,273	100	85,102
Total Net Expenditures	27,503	29,959	22,567	8,606	3,950	15,435	5,260	2,375	9,653	1,480	126,788



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Project Listing
Program: Major Roads
Grade Separation

Year	Project	Description	Net Cost ('000's)
2009	Grade Separation	Goreway Drive Grade Separation Detail Design	425
2009	Grade Separation	Torbram Road Grade Separation - Construction	11,000
2010	Grade Separation	Goreway Drive Grade Separation - Construction	8,200
2010	Grade Separation	Drew Road Grade Separation - Class Environmental Assessment	250
2012	Grade Separation	Drew Road Grade Separation Detail Design	850
2014	Grade Separation	Drew Road Grade Separation - Construction	7,161
Total			27,886

Roads, Storm Drainage & Watercourses

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Project Listing

Program: Major Roads

Intersection Improvements

Year	Project	Description	Net Cost ('000's)
2009	Intersection Improvements	Funding to improve operation deficiencies of intersections throughout the City	1,380
2010	Intersection Improvements	Funding to improve operation deficiencies of intersections throughout the City	1,380
2011	Intersection Improvements	Funding to improve operation deficiencies of intersections throughout the City	1,380
2012	Intersection Improvements	Funding to improve operation deficiencies of intersections throughout the City	1,380
2013	Intersection Improvements	Funding to improve operation deficiencies of intersections throughout the City	1,380
2014	Intersection Improvements	Funding to improve operation deficiencies of intersections throughout the City	1,380
2015	Intersection Improvements	Funding to improve operation deficiencies of intersections throughout the City	1,380
2016	Intersection Improvements	Funding to improve operation deficiencies of intersections throughout the City	1,380
2017	Intersection Improvements	Funding to improve operation deficiencies of intersections throughout the City	1,380
2018	Intersection Improvements	Funding to improve operation deficiencies of intersections throughout the City	1,380
Total			13,800

Roads, Storm Drainage & Watercourses

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Project Listing

Program: Major Roads

Road Improvements - 2009 to 2011 Detail

Year	Project	Activity	Reconstruct/ Widen	New Road	Streetscaping	# Through Lanes	Intersection Improvements	Traffic Signals	Streetlighting	Storm Sewer	Sidewalk	Other	Net Cost ('000's)
2009	Preliminary Engineering Studies	Study											83
2009	Park Street East - Hurontario Street to Rosewood Road	Construct	X				X		X	X	X	X	65
2009	Hurontario Street - Park Street East to Lakeshore Road East	Construct	X			5	X	X	X	X	X	X	1,650
2009	Hurontario Street /Highway 401 Structure Widening Phase 2 of 3	Construct	X			8				X	X	X	1,500
2009	Hurontario Street /Highway 401 Interchange/Northwest Phase2	Construct		X		2	X	X	X	X		X	2,000
2009	Hurontario/Highway 401 Interchange & Southeast Ramp Structure	Construct		X		2	X	X	X	X		X	3,000
2009	Hurontario Street/Highway 401 - Southeast connection/Whittle Road	Construct		X		2	X	X	X	X		X	2,300
2009	Whittle Road- Roundabout - Peer Review	Study											50

Roads, Storm Drainage & Watercourses

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Project Listing

Program: Major Roads

Road Improvements - 2009 to 2011 Detail

Year	Project	Activity	Reconstruct/ Widen	New Road	Streetscaping	# Through Lanes	Intersection Improvements	Traffic Signals	Streetlighting	Storm Sewer	Sidewalk	Other	Net Cost ('000's)
2009	City Centre - Transportation Studies	Study											400
2009	Burnhamthorpe Road West -City Centre	Study											200
2009	Burnhamthorpe Road East - Arista Way to Dixie Road Phase 1 of 2	Construct										X	3,350
2009	Lakeshore Road West - Clarkson Village	Construct										X	100
2010	Argentia Road - Tenth Line West to West of Hydro Corridor	Construct		X		4		X	X	X	X	X	751
2010	City Centre Drive Streetscaping, Duke of York Boulevard to Living Arts Drive	Construct	X		X				X	X	X	X	300
2010	Creebank Road, Matheson Boulevard East to North Limit of Creebank Road	Construct	X			4	X		X	X	X	X	495

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Project Listing

Program: Major Roads

Road Improvements - 2009 to 2011 Detail

Year	Project	Activity	Reconstruct/ Widen	New Road	Streetscaping	# Through Lanes	Intersection Improvements	Traffic Signals	Streetlighting	Storm Sewer	Sidewalk	Other	Net Cost ('000's)
2010	Drew Road - Dixie Road to Tomken Road	Construct		X		4		X	X	X	X	X	5,150
2010	Creebank Road Extension Structure over Highway 401 Phase 1 of 2	Construct		X		4			X	X	X	X	3,000
2010	Creebank Road Extension - Enterprise Road to Shawson Drive	Construct		X		4		X	X	X	X	X	1,348
2010	Drew Road Widening - Torbram Road to 660m Easterly	Construct	X			4		X	X	X	X	X	250
2010	Creebank Road Extension - Highway 401 Bridge to Enterprise Road	Construct		X		4		X	X	X	X	X	2,362
2010	Creebank Road Extension North Limit of Creebank to South of Highway 401	Construct		X		4		X	X	X	X	X	1,500
2010	Preliminary Engineering Studies	Study											83

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Project Listing

Program: Major Roads

Road Improvements - 2009 to 2011 Detail

Year	Project	Activity	Reconstruct/ Widen	New Road	Streetscaping	# Through Lanes	Intersection Improvements	Traffic Signals	Streetlighting	Storm Sewer	Sidewalk	Other	Net Cost ('000's)
2010	Courtneypark Drive East - Kennedy Road to Dixie Road	Design		X		6		X	X	X	X	X	200
2010	Hurontario Street /Highway 401 Structure Widening Phase 3 of 3	Construct	X			8				X	X	X	1,500
2010	Burnhamthorpe Road East - Arista Way to Dixie Road Phase 2 of 2	Construct			X		X	X	X		X	X	3,190
2011	Drew Road Widening - Torbram Road to 660m Easterly	Construct	X			4		X	X	X	X	X	2,336
2011	McLaughlin Road Bristol Road to Britannia Road West	Design and Construct	X				X		X	X	X	X	2,500
2011	Creekbank Road Extension- Shawson Drive to Britannia Road East	Construct		X		4		X	X	X	X	X	1,018
2011	Preliminary Engineering Studies	Study											83

Roads, Storm Drainage & Watercourses

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Project Listing

Program: Major Roads

Road Improvements - 2009 to 2011 Detail

Year	Project	Activity	Reconstruct/ Widen	New Road	Streetscaping	# Through Lanes	Intersection Improvements	Traffic Signals	Streetlighting	Storm Sewer	Sidewalk	Other	Net Cost ('000's)
2011	Tenth Line West- Derry Road West to Argentia Road	Construct	X			4	X	X	X	X	X	X	3,700
2011	Creebank Road Extension Structure over Highway 401 Phase 2 of 2	Construct		X		4			X	X	X	X	7,500
2011	Highway 401 Westbound Off Ramp - Highway 401 to Enterprise Road	Design		X		2	X	X	X	X		X	250
2011	Courtneypark Drive East - Tomken Road to Dixie Road	Design		X		6		X	X	X	X	X	150
2011	Courtneypark Drive East - Kennedy Road to Tomken Road	Design		X		6		X	X	X	X	X	150
2011	Burnhamthorpe Road West- Hurontario Street to Confederation Parkway	Construct			X		X	X	X		X	X	3,500
Total	2009 to 2011												56,014

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Project Listing

Program: Major Roads

Road Improvements - 2012 to 2018

Year	Project	Description	Net Cost ('000's)
2012	Road Improvements	Edwards Boulevard Extension to Highway 407	450
2012	Road Improvements	Preliminary Engineering Studies	100
2012	Road Improvements	Highway 401 Eastbound Ramp Extension - Mavis Road to Belgrade Drive	120
2012	Road Improvements	Mavis Road -220 m North of tracks to Burnhamthorpe Road	206
2012	Road Improvements	Highway 401 Westbound Off Ramp - Highway 401 to Enterprise Road	3,000
2012	Road Improvements	Burnhamthorpe Road -Confederation Parkway to Mavis Road	2,500
2013	Road Improvements	Baif Road - Burnhamthorpe Road West to Webb Drive Levy Credit	231
2013	Road Improvements	Mavis Road -220 m North of tracks to Burnhamthorpe Road	2,039
2013	Road Improvements	Preliminary Engineering Studies	100

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Project Listing

Program: Major Roads

Road Improvements - 2012 to 2018

Year	Project	Description	Net Cost ('000's)
2013	Road Improvements	Belgrave Drive from Cantay Road to North Termius & Highway 401	200
2014	Road Improvements	Centreview Drive Widening - Duke of York to Rathburn Road West	759
2014	Road Improvements	Courtneypark Drive - Kennedy Road to Tomken Road	3,000
2014	Road Improvements	Courtneypark Drive East - Tomken Road to Dixie Road	2,585
2014	Road Improvements	DCA Study (Major Roads)	250
2014	Road Improvements	Preliminary Engineering Studies	100
2014	Road Improvements	Belgrave Drive from Cantay Road to North Termius and High 401	200
2015	Road Improvements	Britannia Road Extension - Burnside to Britannia Road Terminus	500
2015	Road Improvements	Hurontario Ramp Terminal -Highway 401 to Britannia Road	880
2015	Road Improvements	Preliminary Engineering Studies	100



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Project Listing

Program: Major Roads

Road Improvements - 2012 to 2018

Year	Project	Description	Net Cost ('000's)
2015	Road Improvements	Hwy 401 Eastbound Ramp Extension - Mavis Road to Belgrave Drive	250
2015	Road Improvements	Belgrave Drive from Cantay Road to North Termius and Highway 401	2,000
2015	Road Improvements	Derrycrest Drive - Derry Road West to Hurontario Street	150
2016	Road Improvements	Derrycrest - Derry Road West to Hurontario Street	595
2016	Road Improvements	Preliminary Engineering Studies	100
2016	Road Improvements	Creditview Road - Bancroft Drive to Argentia Road	300
2017	Road Improvements	Britannia Road Extension - Burnside Court to Britannia Road Terminus	8,173
2017	Road Improvements	Preliminary Engineering Studies	100
2018	Road Improvements	Preliminary Engineering Studies	100
Total	2012 to 2018		29,088



Roads, Storm Drainage & Watercourses

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2009 - 2018 Net Capital Expenditures by Program and Sub-Program (000's)

Description of Program

Other Engineering

This program consists of Depots and Yards for Works, Facility Repairs for Works, New Vehicles and Equipment, Noise Wall Program, Property Acquisition, Railway Barriers, Salt Management, Sidewalks, Specialized Equipment, Streetlighting, Streetscape, Survey Equipment, Topographical Updating, Traffic Signals, Vehicles and Equipment Replacement, and Works Yards

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Roads, Storm Drainage and Watercourses

2009 - 2018 Net Capital Expenditures By Sub-Program

(000's)

Other Engineering	2009 Budget	2010 Budget	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Depots/Yards	0	150	0	0	0	0	0	0	0	0	150
Facility Repairs - Works	0	0	0	20	20	20	20	20	20	20	140
New Vehicles & Equipment	150	150	750	195	195	195	195	195	195	195	2,415
Noise Wall Program	1,720	1,580	800	430	378	378	378	378	378	375	6,795
Property Acquisition	7,200	2,335	1,670	330	620	120	120	120	120	120	12,755
Railway Barriers	250	0	0	0	0	0	0	0	0	0	250
Salt Management Program	50	50	50	50	50	50	50	50	50	50	500
Sidewalks	715	200	200	200	200	200	200	200	200	200	2,515
Specialized Equipment	50	50	50	50	50	50	50	50	50	50	500
Streetlighting	1,391	1,409	1,476	1,454	1,454	1,544	1,422	1,350	1,350	1,350	14,200
Streetscape	100	100	100	0	0	0	0	0	0	0	300
Survey Equipment	0	0	0	260	0	0	0	0	0	0	260
Topographical Updating	0	90	0	0	0	100	0	0	0	110	300
Traffic Signals	2,005	2,520	2,420	2,320	4,320	1,945	1,945	1,945	1,945	1,945	23,310
Vehicle & Equipment Replacement	3,428	2,816	3,138	3,240	3,313	3,999	3,509	1,731	2,676	1,840	29,690
Works Yards Space	6,000	0	0	0	0	0	0	0	0	0	6,000
Total Net Expenditures	23,059	11,450	10,654	8,549	10,600	8,601	7,889	6,039	6,984	6,255	100,080

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Project Listing

Program: Other Engineering

Depots and Yards - Works

Year	Project	Description	Net Cost ('000's)
2010	Depots and Yards - Works	Transformation of Existing Work Management & Yard Operations in Transportation and Works	150
Total			150

Facility Repair - Works

Year	Project	Description	Net Cost ('000's)
2012	Facility Repairs - Works	Minor facility repairs and maintenance for Works facilities	20
2013	Facility Repairs - Works	Minor facility repairs and maintenance for Works facilities	20
2014	Facility Repairs - Works	Minor facility repairs and maintenance for Works facilities	20
2015	Facility Repairs - Works	Minor facility repairs and maintenance for Works facilities	20
2016	Facility Repairs - Works	Minor facility repairs and maintenance for Works facilities	20

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Project Listing

Program: Other Engineering

Facility Repair - Works

Year	Project	Description	Net Cost ('000's)
2017	Facility Repairs - Works	Minor facility repairs and maintenance for Works facilities	20
2018	Facility Repairs - Works	Minor facility repairs and maintenance for Works facilities	20
Total			140

New Vehicles and Equipment

Year	Project	Description	Net Cost ('000's)
2009	New Vehicles & Equipment	Automated Vehicle Locator	150
2010	New Vehicles & Equipment	Automated Vehicle Locator	150
2011	New Vehicles & Equipment	New vehicles & equipment required due to growth	600
2011	New Vehicles & Equipment	Automated Vehicle Locator	150
2012	New Vehicles & Equipment	New vehicles & equipment required due to growth	195



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Project Listing

Program: Other Engineering

New Vehicles and Equipment

Year	Project	Description	Net Cost ('000's)
2013	New Vehicles & Equipment	New vehicles & equipment required due to growth	195
2014	New Vehicles & Equipment	New vehicles & equipment required due to growth	195
2015	New Vehicles & Equipment	New vehicles & equipment required due to growth	195
2016	New Vehicles & Equipment	New vehicles & equipment required due to growth	195
2017	New Vehicles & Equipment	New vehicles & equipment required due to growth	195
2018	New Vehicles & Equipment	New vehicles & equipment required due to growth	195
Total			2,415

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Project Listing

Program: Other Engineering

Noise Wall Program

Year	Project	Description	Net Cost ('000's)
2009	Noise Wall Program	Replacement of existing noise walls as prioritized according to current condition. Also includes opportunity for new noise wall construction.	1,720
2010	Noise Wall Program	Replacement of existing noise walls as prioritized according to current condition. Also includes opportunity for new noise wall construction.	1,580
2011	Noise Wall Program	Replacement of existing noise walls as prioritized according to current condition. Also includes opportunity for new noise wall construction.	800
2012	Noise Wall Program	Replacement of existing noise walls as prioritized according to current condition. Also includes opportunity for new noise wall construction.	430
2013	Noise Wall Program	Replacement of existing noise walls as prioritized according to current condition. Also includes opportunity for new noise wall construction.	378
2014	Noise Wall Program	Replacement of existing noise walls as prioritized according to current condition. Also includes opportunity for new noise wall construction.	378

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Project Listing

Program: Other Engineering

Noise Wall Program

Year	Project	Description	Net Cost ('000's)
2015	Noise Wall Program	Replacement of existing noise walls as prioritized according to current condition. Also includes opportunity for new noise wall construction.	378
2016	Noise Wall Program	Replacement of existing noise walls as prioritized according to current condition. Also includes opportunity for new noise wall construction.	378
2017	Noise Wall Program	Replacement of existing noise walls as prioritized according to current condition. Also includes opportunity for new noise wall construction.	378
2018	Noise Wall Program	Replacement of existing noise walls as prioritized according to current condition. Also includes opportunity for new noise wall construction.	375
Total			6,795

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Project Listing

Program: Other Engineering

Property Acquisition

Year	Project	Description	Net Cost ('000's)
2009	Property Acquisition	Ongoing program of purchasing right-of-way widenings required for major road improvements	7,200
2010	Property Acquisition	Ongoing program of purchasing right-of-way widenings required for major road improvements	2,335
2011	Property Acquisition	Ongoing program of purchasing right-of-way widenings required for major road improvements	1,670
2012	Property Acquisition	Ongoing program of purchasing right-of-way widenings required for major road improvements	330
2013	Property Acquisition	Ongoing program of purchasing right-of-way widenings required for major road improvements	620
2014	Property Acquisition	Ongoing program of purchasing right-of-way widenings required for major road improvements	120
2015	Property Acquisition	Ongoing program of purchasing right-of-way widenings required for major road improvements	120
2016	Property Acquisition	Ongoing program of purchasing right-of-way widenings required for major road improvements	120

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Project Listing

Program: Other Engineering

Property Acquisition

Year	Project	Description	Net Cost ('000's)
2017	Property Acquisition	Ongoing program of purchasing right-of-way widenings required for major road improvements	120
2018	Property Acquisition	Ongoing program of purchasing right-of-way widenings required for major road improvements	120
Total			12,755

Property Acquisition Details

Year	Road	Limits
2009 - 2018	Intersection Improvements	Various Locations
2009 - 2011	Creebank Road Extension	Highway 401 Bridge to Britannia Road East
2009	Torbram Road - Grade Separation	Torbram Road
2009	Ridgeway Drive	Ridgeway Drive overpass over Highway 403



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Project Listing

Program: Other Engineering

Property Acquisition Details

Year	Road	Limits
2012	Edwards Boulevard	Edwards Boulevard Extension to Highway 407
2013	Courtneypark Drive	Kennedy Road to Tomken Road
2013	Courtneypark Drive	Tomken Road to Dixie Road

Railway Barriers

Year	Project	Description	Net Cost ('000's)
2009	Railway Barriers	Barrier installations along City/Railway lands	250
Total			250

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Project Listing

Program: Other Engineering

Salt Management Program

Year	Project	Description	Net Cost ('000's)
2009	Salt Management Program	Implementation of plan to comply with Environment Canada's Code of Practice for the Environmental Management of Road Salt.	50
2010	Salt Management Program	Implementation of plan to comply with Environment Canada's Code of Practice for the Environmental Management of Road Salt.	50
2011	Salt Management Program	Implementation of plan to comply with Environment Canada's Code of Practice for the Environmental Management of Road Salt.	50
2012-2018	Salt Management Program	Implementation of plan to comply with Environment Canada's Code of Practice for the Environmental Management of Road Salt.	350
Total			500

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Project Listing

Program: Other Engineering

Sidewalks

Year	Project	Description	Net Cost ('000's)
2009	Sidewalks	New sidewalk construction throughout the City.	715
2010	Sidewalks	New sidewalk construction throughout the City.	200
2011	Sidewalks	New sidewalk construction throughout the City.	200
2012-2018	Sidewalks	New sidewalk construction throughout the City.	1,400
Total			2,515

Specialized Equipment

Year	Project	Description	Net Cost ('000's)
2009	Specialized Equipment	Equipment required to maintain the City's road and traffic signal network	50
2010	Specialized Equipment	Equipment required to maintain the City's road and traffic signal network	50
2011	Specialized Equipment	Equipment required to maintain the City's road and traffic signal network	50
2012-2018	Specialized Equipment	Equipment required to maintain the City's road and traffic signal network	350
Total			500

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Project Listing

Program: Other Engineering

Streetlighting

Year	Project	Description	Net Cost ('000's)
2009	Streetlighting	On going program of installing and upgrading streetlighting along various roads throughout the City.	1,391
2010	Streetlighting	On going program of installing and upgrading streetlighting along various roads throughout the City.	1,409
2011	Streetlighting	On going program of installing and upgrading streetlighting along various roads throughout the City.	1,476
2012	Streetlighting	On going program of installing and upgrading streetlighting along various roads throughout the City.	1,454
2013	Streetlighting	On going program of installing and upgrading streetlighting along various roads throughout the City.	1,454
2014	Streetlighting	On going program of installing and upgrading streetlighting along various roads throughout the City.	1,544
2015	Streetlighting	On going program of installing and upgrading streetlighting along various roads throughout the City.	1,422
2016	Streetlighting	On going program of installing and upgrading streetlighting along various roads throughout the City.	1,350

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Project Listing Program: Other Engineering

Streetlighting

Year	Project	Description	Net Cost ('000's)
2017	Streetlighting	On going program of installing and upgrading streetlighting along various roads throughout the City.	1,350
2018	Streetlighting	On going program of installing and upgrading streetlighting along various roads throughout the City.	1,350
Total			14,200

Streetscape

Year	Project	Description	Net Cost ('000's)
2009	Street Cleanliness	Street cleanliness throughout the City.	100
2010	Street Cleanliness	Street cleanliness throughout the City.	100
2011	Street Cleanliness	Street cleanliness throughout the City.	100
Total			300



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Project Listing
Program: Other Engineering
Survey Equipment

Year	Project	Description	Net Cost ('000's)
2012	Survey Equipment	Base stations and rover	126
2012	Survey Equipment	Rovers	84
2012	Survey Equipment	Upgrade 2 stations - Autolock to robotic	17
2012	Survey Equipment	Upgrade 2 stations to full robotics	33
Total			260

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Project Listing

Program: Other Engineering

Topographical Updating

Year	Project	Description	Net Cost ('000's)
2010	Topographical Updating	Update of 1:2,000 topographic mapping asset to supply the various City business systems with up-to-date information including Mississauga Approval Xpress (MAX), TXM Tax Manager and the new eCity portal	90
2014	Topographical Updating	Update of 1:2,000 topographic mapping asset to supply the various City business systems with up-to-date information including Mississauga Approval Xpress (MAX), TXM Tax Manager and the new eCity portal	100
2018	Topographical Updating	Update of 1:2,000 topographic mapping asset to supply the various City business systems with up-to-date information including Mississauga Approval Xpress (MAX), TXM Tax Manager and the new eCity portal	110
Total			300

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Project Listing Program: Other Engineering

Traffic Signals

Year	Project	Description	Net Cost ('000's)
2009	Traffic Signals	Field Equipment Replacement - Traffic Controllers	190
2009	Traffic Signals	Traffic Signal Equipment Enhancements	185
2009	Traffic Signals	New traffic signal installations and improvements at various intersections throughout the City	1,500
2009	Traffic Signals	Traffic Signals Pre-Emption Equipment	30
2009	Traffic Signals	Traffic System and Intelligent Transportation System (ITS)	100
2010	Traffic Signals	Field Equipment Replacement - Traffic Controllers	190
2010	Traffic Signals	Integrated Road Safety Program (IRSP)	200
2010	Traffic Signals	LED City Wide Traffic Signal Lens Replacement	375
2010	Traffic Signals	Traffic Signal Equipment Enhancements	155
2010	Traffic Signals	New traffic signal installations and improvements at various intersections throughout the City	1,500



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Project Listing

Program: Other Engineering

Traffic Signals

Year	Project	Description	Net Cost ('000's)
2010	Traffic Signals	Traffic System and Intelligent Transportation System (ITS)	100
2011	Traffic Signals	Field Equipment Replacement - Traffic Controllers	190
2011	Traffic Signals	LED City Wide Traffic Signal Lens Replacement	375
2011	Traffic Signals	Traffic Management Centre	100
2011	Traffic Signals	Traffic Signal Equipment Enhancements	155
2011	Traffic Signals	New traffic signal installations and improvements at various intersections throughout the City	1,500
2011	Traffic Signals	Traffic System and Intelligent Transportation System (ITS)	100
2012	Traffic Signals	Field Equipment Replacement - Traffic Controllers	190
2012	Traffic Signals	LED City Wide Traffic Signal Lens Replacement	375
2012	Traffic Signals	Traffic Signal Equipment Enhancements	155

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Project Listing

Program: Other Engineering

Traffic Signals

Year	Project	Description	Net Cost ('000's)
2012	Traffic Signals	New traffic signal installations and improvements at various intersections throughout the City	1,500
2012	Traffic Signals	Traffic System and Intelligent Transportation System (ITS)	100
2013	Traffic Signals	Field Equipment Replacement - Traffic Controllers	190
2013	Traffic Signals	LED City Wide Traffic Signal Lens Replacement	375
2013	Traffic Signals	Traffic Signal Equipment Enhancements	155
2013	Traffic Signals	New traffic signal installations and improvements at various intersections throughout the City	1,500
2013	Traffic Signals	Traffic System and Intelligent Transportation System (ITS)	100
2013	Traffic Signals	Traffic System and Intelligent Transportation System (ITS)	2,000
2014	Traffic Signals	Field Equipment Replacement - Traffic Controllers	190
2014	Traffic Signals	Traffic Signal Equipment Enhancements	155

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Project Listing

Program: Other Engineering

Traffic Signals

Year	Project	Description	Net Cost ('000's)
2014	Traffic Signals	New traffic signal installations and improvements at various intersections throughout the City	1,500
2014	Traffic Signals	Traffic System and Intelligent Transportation System (ITS)	100
2015	Traffic Signals	Field Equipment Replacement - Traffic Controllers	190
2015	Traffic Signals	Traffic Signal Equipment Enhancements	155
2015	Traffic Signals	New traffic signal installations and improvements at various intersections throughout the City	1,500
2015	Traffic Signals	Traffic System and Intelligent Transportation System (ITS)	100
2016	Traffic Signals	Field Equipment Replacement - Traffic Controllers	190
2016	Traffic Signals	Traffic Signal Equipment Enhancements	155
2016	Traffic Signals	New traffic signal installations and improvements at various intersections throughout the City	1,500

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Project Listing Program: Other Engineering

Traffic Signals

Year	Project	Description	Net Cost ('000's)
2016	Traffic Signals	Traffic System and Intelligent Transportation System (ITS)	100
2017	Traffic Signals	Field Equipment Replacement - Traffic Controllers	190
2017	Traffic Signals	Traffic Signal Equipment Enhancements	155
2017	Traffic Signals	New traffic signal installations and improvements at various intersections throughout the City	1,500
2017	Traffic Signals	Traffic System and Intelligent Transportation System (ITS)	100
2018	Traffic Signals	Field Equipment Replacement - Traffic Controllers	190
2018	Traffic Signals	Traffic Signal Equipment Enhancements	155
2018	Traffic Signals	New traffic signal installations and improvements at various intersections throughout the City	1,500
2018	Traffic Signals	Traffic System and Intelligent Transportation System (ITS)	100
Total			23,310

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Project Listing

Program: Other Engineering

Vehicle and Equipment Replacement

Year	Project	Description	Net Cost ('000's)
2009	Vehicle & Equipment Replacement	Replacement of Corporate vehicles & equipment (excluding Fire & Transit) based on mileage or age.	3,428
2010	Vehicle & Equipment Replacement	Replacement of Corporate vehicles & equipment (excluding Fire & Transit) based on mileage or age.	2,816
2011	Radio Replacement	Parking Enforcement	33
2011	Vehicle & Equipment Replacement	Replacement of Corporate vehicles & equipment (excluding Fire & Transit) based on mileage or age.	3,105
2012	Vehicle & Equipment Replacement	Replacement of Corporate vehicles & equipment (excluding Fire & Transit) based on mileage or age.	3,240
2013	Vehicle & Equipment Replacement	Replacement of Corporate vehicles & equipment (excluding Fire & Transit) based on mileage or age.	3,313
2014	Radio Replacement	Parking Enforcement	33
2014	Vehicle & Equipment Replacement	Replacement of Corporate vehicles & equipment (excluding Fire & Transit) based on mileage or age.	3,966
2015	Vehicle & Equipment Replacement	Replacement of Corporate vehicles & equipment (excluding Fire & Transit) based on mileage or age.	3,509

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Project Listing

Program: Other Engineering

Vehicle and Equipment Replacement

Year	Project	Description	Net Cost ('000's)
2016	Vehicle & Equipment Replacement	Replacement of Corporate vehicles & equipment (excluding Fire & Transit) based on mileage or age.	1,731
2017	Radio Replacement	Parking Enforcement	33
2017	Vehicle & Equipment Replacement	Replacement of Corporate vehicles & equipment (excluding Fire & Transit) based on mileage or age.	2,643
2018	Vehicle & Equipment Replacement	Replacement of Corporate vehicles & equipment (excluding Fire & Transit) based on mileage or age.	1,840
Total			29,690

Project Listing
Program: Other Engineering

Replacement Details

2009 Replacements	
Equipment/Vehicle	
8 - 1/2 Ton Extended Cab Trucks	3 - Pumps
2 - 1/2 Ton Pickups	1 - Loaders
5 - 3/4 Ton Pick Up Trucks	3 - Park Trackless
7 - 1 Ton Crewcabs	4 - Riding Mowers
4 - 1 Ton Pickup	5 - Animal Vehicles
2 - Rollers	5 - Sidewalk Sanders
4 - 3/4 Ton Vans	10 - 1 Ton Delivery Trucks
3 - 1 Ton Vans	5 - Trailers



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Project Listing

Program: Other Engineering

Replacement Details

2009 Replacements	
2 - Compact Cars	1 - Turf Sweeper
8 - 1 Ton Crewcab Dump Trucks	2 - Tractor Loaders
5 - Golf Course Equipment	1 - Bucket Truck
4 - Ice Resurfacers	1 - Min Van- Passenger /1/2 Ton Van/Hot Box /Utility Truckster

Works Yards Space

Year	Project	Description	Net Cost ('000's)
2009	Works Yards	South East Works Depot, Land/Domes/Sand Shacks	6,000
Total			6,000

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2009 - 2018 Net Capital Expenditures by Program and Sub-Program (000's)

Description of Program

Roads Rehabilitation

This program aims to maintain the city's aging road infrastructure in a state of 'good repair'. It covers roadway rehabilitation, preventative maintenance, and data collection on a rotating basis for the pavement management system.

Road Rehabilitation	2009 Budget	2010 Budget	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Crack Sealing	100	100	100	100	100	100	100	100	100	100	1,000
Parking Lot Rehabilitation	0	50	0	50	0	50	0	50	0	50	250
Roadway Infrastructure Review	600	0	0	600	0	0	600	0	0	600	2,400
Road Rehabilitation	21,100	21,100	21,000	22,000	23,500	23,500	23,500	23,500	23,500	23,500	226,200
Total Net Expenditures	21,800	21,250	21,100	22,750	23,600	23,650	24,200	23,650	23,600	24,250	229,850



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Project Listing

Program: Road Rehabilitation

Crack Sealing

Year	Project	Description	Net Cost ('000's)
2009	Crack Sealing	Preventative maintenance funding for road crack sealing	100
2010	Crack Sealing	Preventative maintenance funding for road crack sealing	100
2011	Crack Sealing	Preventative maintenance funding for road crack sealing	100
2012	Crack Sealing	Preventative maintenance funding for road crack sealing	100
2013	Crack Sealing	Preventative maintenance funding for road crack sealing	100
2014	Crack Sealing	Preventative maintenance funding for road crack sealing	100
2015	Crack Sealing	Preventative maintenance funding for road crack sealing	100
2016	Crack Sealing	Preventative maintenance funding for road crack sealing	100

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Project Listing

Program: Road Rehabilitation

Crack Sealing

Year	Project	Description	Net Cost ('000's)
2017	Crack Sealing	Preventative maintenance funding for road crack sealing	100
2018	Crack Sealing	Preventative maintenance funding for road crack sealing	100
Total			1,000

Parking Lot Rehabilitation

Year	Project	Description	Net Cost ('000's)
2010	Parking Lot Rehabilitation	Ongoing funding to rehabilitate parking lots.	50
2012	Parking Lot Rehabilitation	Ongoing funding to rehabilitate parking lots.	50
2014	Parking Lot Rehabilitation	Ongoing funding to rehabilitate parking lots.	50
2016	Parking Lot Rehabilitation	Ongoing funding to rehabilitate parking lots.	50
2018	Parking Lot Rehabilitation	Ongoing funding to rehabilitate parking lots.	50
Total			250



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Project Listing
Program: Road Rehabilitation
Roadway Infrastructure Review

Year	Project	Description	Net Cost ('000's)
2009	Roadway Infrastructure Review	Ongoing funding to update the pavement management system data	600
2012	Roadway Infrastructure Review	Ongoing funding to update the pavement management system data	600
2015	Roadway Infrastructure Review	Ongoing funding to update the pavement management system data	600
2018	Roadway Infrastructure Review	Ongoing funding to update the pavement management system data	600
Total			2,400



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Project Listing

Program: Road Rehabilitation

Road Rehabilitation

Year	Project	Description	Net Cost ('000's)
2009	Road Rehabilitation	Various Industrial Roads	8,804
2009	Road Rehabilitation	Various Major Roads	6,532
2009	Road Rehabilitation	Various Residential Roads	5,764
2010	Road Rehabilitation	Various Industrial Roads	6,083
2010	Road Rehabilitation	Various Major Roads	9,807
2010	Road Rehabilitation	Various Residential Roads	5,210
2011	Road Rehabilitation	Various Industrial Roads	6,580
2011	Road Rehabilitation	Various Major Roads	7,370
2011	Road Rehabilitation	Various Residential Roads	7,050
2012	Road Rehabilitation	Various Industrial Roads	7,403



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Project Listing

Program: Road Rehabilitation

Road Rehabilitation

Year	Project	Description	Net Cost ('000's)
2012	Road Rehabilitation	Various Major Roads	8,723
2012	Road Rehabilitation	Various Residential Roads	5,875
2013	Road Rehabilitation	Various Industrial Roads	7,471
2013	Road Rehabilitation	Various Major Roads	10,179
2013	Road Rehabilitation	Various Residential Roads	5,850
2014	Road Rehabilitation	Various Industrial Roads	7,403
2014	Road Rehabilitation	Various Major Roads	10,223
2014	Road Rehabilitation	Various Residential Roads	5,875
2015	Road Rehabilitation	Various Industrial Roads	7,403
2015	Road Rehabilitation	Various Major Roads	10,223

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Project Listing

Program: Road Rehabilitation

Road Rehabilitation

Year	Project	Description	Net Cost ('000's)
2015	Road Rehabilitation	Various Residential Roads	5,875
2016	Road Rehabilitation	Various Industrial Roads	7,403
2016	Road Rehabilitation	Various Major Roads	10,223
2016	Road Rehabilitation	Various Residential Roads	5,875
2017	Road Rehabilitation	Various Industrial Roads	7,471
2017	Road Rehabilitation	Various Major Roads	10,179
2017	Road Rehabilitation	Various Residential Roads	5,850
2018	Road Rehabilitation	Various Industrial Roads	7,403
2018	Road Rehabilitation	Various Major Roads	10,223
2018	Road Rehabilitation	Various Residential Roads	5,875
Total			226,200

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Project Listing

Program: Road Rehabilitation

Residential Road Resurfacing

Year	Street	From	To
2009	Ashburnham Place	Galloway Crescent	End
2009	Bluegrass Court	Galloway Crescent	End
2009	Brightpool Crescent	Willow Way	Goldenbrook Drive
2009	Carrying Place	Galloway Crescent	End
2009	Chantenay Drive	North End of Culdesac	Tedwyn Drive (East Leg)
2009	Chicory Court	Galloway Crescent	End
2009	Clarksville Court	Chantenay Drive	End
2009	Colby Court	Moongate Crescent	North end
2009	Evenstarr Court	Ladyburn Crescent	Ladyburn Crescent
2009	Fuchsia Place	Galloway Crescent	End

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Project Listing

Program: Road Rehabilitation

Residential Road Resurfacing

Year	Street	From	To
2009	Galloway Crescent	Queensbridge Drive	Queensbridge Drive
2009	Goldenbrook Drive	Willow Way	Willow Way
2009	Highbrook Avenue	River Grove Avenue	Creditview Road
2009	Homelands Drive	Winston Churchill Boulevard	Sheridan Park Drive
2009	Invergordon Lane	Willow Way	Highbrook Avenue
2009	Kingsbank Court	River Grove Avenue	East End
2009	Ladyburn Crescent	Highbrook Avenue	Highbrook Avenue
2009	Meadowfield Crescent	Invergordon Lane	Invergordon Lane
2009	Moongate Crescent	Invergordon Lane	Invergordon Lane
2009	Moonglow Court	Chantenay Drive	End

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Project Listing

Program: Road Rehabilitation

Residential Road Resurfacing

Year	Street	From	To
2009	Ontario Street	Queen Street	West End
2009	Oslo Crescent	Copenhagen Road	Copenhagen Road
2009	Oxford Square	Wakefield Crescent	End
2009	Rebecca Court	Ladyburn Crescent	East End
2009	Riverdale Crescent	River Grove Avenue	River Grove Avenue
2009	Rutledge Road	Ontario Street	North End
2009	Squall Court	Riverdale Crescent	West End
2009	Wakefield Crescent	Rathburn Road	Rathburn Road
2009	Willow Way	Villageview Place	Creditview Road
2009	Wycliffe Way	Galloway Crescent	End

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Project Listing

Program: Road Rehabilitation

Major, Collector & Industrial Road Rehabilitation

Year	Street	From	To
2009	Atlantic Drive	Enterprise Road	400m north of Enterprise Road
2009	Columbus Road	Derry Road	Midway Boulevard
2009	Creditview Road	Eglinton Ave	Bristol Road West
2009	Duke of York Boulevard	Rathburn Road	Burnhamthorpe Road West
2009	Enterprise Road	Shawson Drive	Atlantic Drive
2009	Ernest Samuel Drive	Dixie Road	North End
2009	Invader Crescent	Midway Boulevard	Midway Boulevard
2009	Kennedy Road	Abilene Drive	Courtneypark Drive East
2009	Matheson Boulevard East	Hurontario Street	McLaughlin Road
2009	Meadowvale Boulevard	Meadowpine Boulevard	West Credit Avenue



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Project Listing

Program: Road Rehabilitation

Major, Collector & Industrial Road Rehabilitation

Year	Street	From	To
2009	Midway Boulevard	Dixie Road	Tomken Road
2009	Ridgeway Drive	Unity Drive	Dundas Street
2009	River Grove Avenue	Bristol Road West	Britannia Road
2009	Tannery Street	Queen Street	Joymar Drive
2009	Truscott Drive	Clarkson Road	Winston Churchill Boulevard

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2009 - 2018 Net Capital Expenditures by Program and Sub-Program (000's)

Description of Program

Storm Drainage

This program covers works required to ensure the storm sewer and watercourse systems within the City, which consists of storm sewers, storm water management (SWM) facilities, ditches, channels, watercourses and culverts, continues to function efficiently and effectively.

Storm Drainage	2009 Budget	2010 Budget	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Channelization	3,230	0	0	0	0	0	0	0	240	1,390	4,860
Culvert Improvement	0	0	0	0	0	0	0	0	2,190	90	2,280
Erosion Control	1,180	2,130	3,140	2,750	2,250	5,280	5,020	2,990	2,340	3,260	30,340
Flood Relief	200	0	0	0	0	0	0	0	210	0	410
Storm Sewer	320	0	0	0	0	0	0	0	0	0	320
Storm Sewer Oversizing	290	290	290	290	290	290	290	290	290	290	2,900
Study	100	250	750	500	100	0	0	0	500	100	2,300
Storm Water Management (SWM) Facilities	280	3,890	2,210	2,260	980	1,820	5,880	3,460	3,930	8,910	33,620
Total Net Expenditures	5,600	6,560	6,390	5,800	3,620	7,390	11,190	6,740	9,700	14,040	77,030

Roads, Storm Drainage & Watercourses

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2009	Meadowvale Business Park District (North 16) - Remaining Channelization and Culvert Works	Construct				X	X			820
2009	Meadowvale Business Park District (North 16) - Ponds 5502 and 5503	Construct						X		2,410
2009	Mary Fix Creek Erosion Control - Harborn Road to Premium Way	Design and Construct		X						50
2009	Minor Erosion Control Works - Various Locations	Construct		X						80
2009	Sheridan Creek Erosion Control - Downstream of Meadow Wood Road	Construct		X						1,020
2009	Cooksville Creek Erosion Control - Dundas Street East to King Street East	Design		X						30
2009	Park Royal Drainage Improvement - Lewisham Drive Area	Construct	X							200

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2009	Dundas Street West Storm Sewer - Clayhill Road to Mason Heights	Construct							Storm Sewer Replacement	320
2009	Storm Sewer Oversizing - Various Locations	Construct							Minor System Capacity	290
2009	Dakota Road and Full Moon Circle Relief Well Systems Study	Study							Groundwater Control System	100
2009	Monitoring and Minor Modification of Storm Water Management Facilities - Various Locations	Study						X		80
2009	Storm Water Management Pond Rehabilitation - Osprey Marsh (Pond 5601)	Rehabilitate						X		200
2010	Cooksville Creek Erosion Control - North of Dundas Street East behind Jaguar Valley Drive	Design and Construct		X						170

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2009	Dundas Street West Storm Sewer - Clayhill Road to Mason Heights	Construct							Storm Sewer Replacement	320
2009	Storm Sewer Oversizing - Various Locations	Construct							Minor System Capacity	290
2009	Dakota Road and Full Moon Circle Relief Well Systems Study	Study							Groundwater Control System	100
2009	Monitoring and Minor Modification of Storm Water Management Facilities - Various Locations	Study						X		80
2009	Storm Water Management Pond Rehabilitation - Osprey Marsh (Pond 5601)	Rehabilitate						X		200

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2010	Cooksville Creek Erosion Control - North of Dundas Street East behind Jaguar Valley Drive	Design and Construct		X						170
2010	Cooksville Creek Erosion Control - Camilla Road to North Service Road	Construct		X						270
2010	Credit River Erosion Control - South of Dundas Street West behind Jarvis Street	Design and Construct		X						160
2010	Credit River Erosion Control - Adjacent to Ostler Court	Design and Construct		X						1,260
2010	Mary Fix Creek Erosion Control - Harborn Road to Premium Way	Design		X						170
2010	Cooksville Creek Erosion Control - Dundas Street East to King Street East	Construct		X						100
2010	Storm Sewer Oversizing - Various Locations	Construct							Minor System Capacity	290

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2010	Storm Sewer Network Modelling - Pilot Watershed	Study							Minor System Capacity	250
2010	Monitoring and Minor Modification of Storm Water Management Facilites - Various Locations	Study						X		80
2010	Retrofit Arch Storm Water Management Pond 5401 - West of Argentia Road and North of Derry Road West	Design						X		200
2010	Retrofit Loyalist Creek Storm Water Management Pond 5901 - West of Winston Churchill Drive and North of Dundas Street West	Retrofit						X		2,000
2010	Retrofit Loyalist Creek Storm Water Management Pond 5903 - West of Winston Churchill Drive and South of The Collegeway	Design and Construct						X		1,610

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2011	Mullet Creek Erosion Control - Burnhamthorpe Road West to behind Woodchuck Lane	Construct		X						1,500
2011	Credit River Erosion Control - South of Queen Elizabeth Way to behind Pinetree Crescent	Design and Construct		X						110
2011	Minor Erosion Control Works - Various Locations	Construct		X						80
2011	Cooksville Creek Erosion Control - Burnhamthorpe Road East to Mississauga Valley Boulevard	Design		X						110
2011	Sheridan Creek Erosion Control - Clarkson Road to Meadow Wood Road	Construct		X						1,340
2011	Storm Sewer Oversizing - Various Locations	Construct							Minor System Capacity	290

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2011	Storm Sewer Network Modelling - City-wide Model	Study							Minor System Capacity	750
2011	Monitoring and Minor Modification of Storm Water Management Facilites - Various Locations	Study						X		80
2011	Retrofit Arch Storm Water Management Pond 5401 - West of Argentia Road and North of Derry Road West	Construct						X		1,530
2011	Storm Water Management Pond Dredging and Rehabilitation - Neighbourhood 5D (Pond 3601)	Rehabilitate						X		400
2011	Retrofit Mullet Creek Storm Water Management Pond 5402 - North of Derry Road West and West of Sentex Drive	Design						X		200

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2012	Cooksville Creek Erosion Control - Rathburn Road to Absolute Avenue	Design		X						240
2012	Minor Erosion Control Works - Various Locations	Construct		X						80
2012	Sawmill Creek Erosion Control - South of Burnhamthorpe Road West and behind Gazebo Court	Design		X						140
2012	Cooksville Creek Erosion Control - North of Dundas Street East behind Jaguar Valley Drive	Design and Construct		X						950
2012	Credit River Erosion Control - South of Dundas Street West behind Jarvis Street	Design and Construct		X						810
2012	Mullet Creek Erosion Control - Wabukayne Tributary, Upstream of Canadian Pacific Railway	Design		X						480
2012	Fletchers Creek Erosion Control - West of Second Line	Design and Construct		X						50

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2012	Storm Sewer Oversizing - Various Locations	Construct							Minor System Capacity	290
2012	Mississauga Storm Water Quality Control Strategy Update	Construct						X		500
2012	Monitoring and Minor Modification of Storm Water Management Facilities - Various Locations	Study						X		80
2012	Retrofit Mullet Creek Storm Water Management Pond 5402 - North of Derry Road West and West of Sentex Drive	Design and Construct						X		1,930
2012	Storm Water Management Pond Dredging and Rehabilitation - Preliminary Engineering for 2013 projects	Rehabilitate						X		50

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2012	Storm Water Management Pond Dredging and Rehabilitation - Eastgate Business Park (Pond 2601A)	Design and Construct						X		200
2013	Cooksville Creek Erosion Control - Kirwin Avenue to Canadian Pacific Railway	Design and Construct		X						80
2013	Cooksville Creek Erosion Control - Highway 403 to Kingsbridge Garden Circle	Design and Construct		X						110
2013	Cooksville Creek Erosion Control - Cawthra Creek Diversion, North of Lakeshore Road East	Design and Construct		X						50
2013	Cooksville Creek Erosion Control - Queen Elizabeth Way to Elaine Trail	Design and Construct		X						190
2013	Lornewood Creek Erosion Control - North of Springhill Drive to behind Algonquin Drive	Design and Construct		X						50

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2013	Mimico Creek Erosion Control - Etude Drive to Derry Road East	Design and Construct		X						30
2013	Minor Erosion Control Works - Various Locations	Construct		X						80
2013	Mullet Creek Erosion Control - Upstream and downstream of Highway 403	Design and Construct		X						70
2013	Tecumseh Creek Erosion Control - South of Indian Road	Design and Construct		X						130
2013	Credit River Erosion Control - South of Queen Elizabeth Way to behind Pinetree Crescent	Construct		X						540
2013	Mullet Creek Erosion Control - Wabukayne Tributary, Downstream of Erin Mills Parkway	Design		X						250
2013	Cooksville Creek Erosion Control - Burnhamthorpe Road East to Mississauga Valley Boulevard	Construct		X						450

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2013	Fletchers Creek Erosion Control - West of Second Line	Construct		X						220
2013	Storm Sewer Oversizing - Various Locations	Construct							Minor System Capacity	290
2013	Development Charges Update	Update							X	100
2013	Meadowvale Area Storm Water Management Facility 4503 - North of Highway 401, East of Credit River	Design and Construct						X		200
2013	Monitoring and Minor Modification of Storm Water Management Facilities - Various Locations	Study						X		80
2013	Storm Water Management Pond Dredging and Rehabilitation - Churchill Meadows, Fletchers Creek FFP3 and Shipp-Higgins (Ponds 5701, 4403 and 4402)	Retrofit						X		700

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2014	Cooksville Creek Erosion Control - Rathburn Road to Absolute Avenue	Construct		X						1,380
2014	Etobicoke Creek Erosion Control - Eglinton Avenue East to Hydro Corridor	Design		X						110
2014	Minor Erosion Control Works - Various Locations	Construct		X						80
2014	Mullet Creek Erosion Control - Tannery Street to Thomas Street	Design and Construct		X						160
2014	Sawmill Creek Erosion Control - South of Burnhamthorpe Road West and behind Gazebo Court	Construct		X						730
2014	Mullet Creek Erosion Control - Wabukayne Tributary, Upstream of Canadian Pacific Railway	Construct		X						2,820
2014	Storm Sewer Oversizing - Various Locations	Construct							Minor System Capacity	290

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2014	Monitoring and Minor Modification of Storm Water Management Facilites - Various Locations	Study						X		80
2014	Meadowvale Area Storm Water Management Facility 4503 - North of Highway 401, East of Credit River	Construct						X		1,740
2015	Cooksville Creek Erosion Control - King Street East to North of Paisley Boulevard	Design and Construct		X						90
2015	Mary Fix Erosion Control - Old River Road to the Credit River	Design and Construct		X						90
2015	Minor Erosion Control Works - Various Locations	Construct		X						80
2015	Wolfedale Creek Erosion Control - North and South of Central Parkway West	Design		X						160
2015	Tecumseh Creek Erosion Control - South of Indian Road	Design and Construct		X						530

Roads, Storm Drainage & Watercourses

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Project Listing

Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2015	Lornewood Creek Erosion Control - North of Springhill Drive to behind Algonquin Drive	Construct		X						150
2015	Mullet Creek Erosion Control - Upstream and downstream of Highway 403	Construct		X						200
2015	Cooksville Creek Erosion Control - Cawthra Creek Diversion, North of Lakeshore Road East	Construct		X						170
2015	Mimico Creek Erosion Control - Etude Drive to Derry Road East	Construct		X						90
2015	Cooksville Creek Erosion Control - Queen Elizabeth Way to Elaine Trail	Construct		X						1,030
2015	Cooksville Creek Erosion Control - Highway 403 to Kingsbridge Garden Circle	Construct		X						600

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Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2015	Cooksville Creek Erosion Control - Kirwin Avenue to Canadian Pacific Railway	Construct		X						420
2015	Mullet Creek Erosion Control - Wabukayne Tributary, Downstream of Erin Mills Parkway	Construct		X						1,410
2015	Storm Sewer Oversizing - Various Locations	Construct							Minor System Capacity	290
2015	Clearview Creek Storm Water Management Facility 0401 - South of Lakeshore Road West	Design and Construct						X		5,750
2015	Monitoring and Minor Modification of Storm Water Management Facilities - Various Locations	Study						X		80

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Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2015	Storm Water Management Pond Dredging and Rehabilitation - Preliminary Engineering for 2016 projects	Rehabilitate						X		50
2016	Credit River Erosion Control - North of Queen Elizabeth Way, behind Mississauga Crescent	Design and Construct		X						170
2016	Credit River Erosion Control - North of Canadian National Railway, behind Stavebank Road and behind Mississauga Road	Design and Construct		X						460
2016	Fletchers Creek Erosion Control - Upstream of Derry Road West to storm outfall	Design and Construct		X						140
2016	Minor Erosion Control Works - Various Locations	Construct		X						80

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Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2016	Mullet Creek Erosion Control - Quenippenon Tributary, Upstream of Erin Mills Parkway to Middlebury Drive	Design and Construct		X						290
2016	Etobicoke Creek Erosion Control - Eglinton Avenue East to Hydro Corridor	Construct		X						410
2016	Cooksville Creek Erosion Control - King Street East to North of Paisley Boulevard	Construct		X						390
2016	Credit River Erosion Control - West of Creditview Road, behind Kenninghall Boulevard	Design and Construct		X						170
2016	Mullet Creek Erosion Control - Tannery Street to Thomas Street	Construct		X						880
2016	Storm Sewer Oversizing - Various Locations	Construct							Minor System Capacity	290

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Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2016	Avonhead Creek Storm Water Management Facility 0402 - North of Lakeshore Road West, East of Hazelhurst Road	Design and Construct						X		730
2016	Lakeshore Creek Storm Water Management Facility 0403 - Lakeshore Road West at Clarkson Waste Water Treatment Plant	Construct						X		1,550
2016	Land Acquisition for Avonhead Creek Storm Water Management Facility 0402	Acquire						X		200
2016	Land Acquisition for Lakeshore Creek Storm Water Management Facility 0403	Construct						X		200
2016	Monitoring and Minor Modification of Storm Water Management Facilities - Various Locations	Study						X		80

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Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2016	Storm Water Management Pond Dredging and Rehabilitation - Churchill Meadows, Mattamy Lorne Park, Mary Fix Creek and Fieldrun Subdivision (Ponds 5702, 0801, 2201 and 5301)	Retrofit						X		700
2017	Cooksville Creek Channelization - Mississauga Valley Boulevard to Canadian Pacific Railway	Design					X			200
2017	Little Etobicoke Creek Channelization - North of Burnhamthorpe Road East	Construct					X			40
2017	Cooksville Creek Culvert Improvement - Canadian Pacific Railway culvert	Design and Construct				X				2,190
2017	Cooksville Creek Erosion Control - Rhonda Valley Boulevard to Mississauga Valley Boulevard	Design		X						100

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Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2017	Minor Erosion Control Works - Various Locations	Construct		X						80
2017	Wolfedale Creek Erosion Control - North and South of Central Parkway West	Construct		X						740
2017	Mary Fix Erosion Control - Old River Road to the Credit River	Construct		X						530
2017	Credit River Erosion Control - West of Creditview Road, behind Kenninghall Boulevard	Construct		X						890
2017	Cooksville Creek Dyking - Downstream of Central Parkway East	Design and Construct	X							210
2017	Storm Sewer Oversizing - Various Locations	Construct							Minor System Capacity	290
2017	Mississauga Storm Water Quality Control Strategy Update	Construct						X		500

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Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2017	Credit River Storm Water Management Facility 4502 - South of Credit River, East of Creditview Road	Design and Construct						X		3,850
2017	Monitoring and Minor Modification of Storm Water Management Facilities - Various Locations	Study						X		80
2018	Cooksville Creek Channelization - Mississauga Valley Boulevard to Canadian Pacific Railway	Construct					X			1,050
2018	Little Etobicoke Creek Channelization - North of Burnhamthorpe Road East	Construct					X			340
2018	Cooksville Creek Culvert Improvement - Canadian National Railway Culvert	Design				X				90
2018	Cooksville Creek Erosion Control - Rhonda Valley Boulevard to Mississauga Valley Boulevard	Construct		X						430

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Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2018	Minor Erosion Control Works - Various Locations	Design and Construct		X						80
2018	Etobicoke Creek Erosion Control - North of Eglinton Avenue	Construct		X						150
2018	Credit River Erosion Control - North of Queen Elizabeth Way, behind Mississauga Crescent	Construct		X						890
2018	Mullet Creek Erosion Control - Quenippenon Tributary, Upstream of Erin Mills Parkway to Middlebury Drive	Construct		X						1,710
2018	Storm Sewer Oversizing - Various Locations	Construct							Minor System Capacity	290
2018	Development Charges Update	Study							X	100
2018	Land Acquisition for Etobicoke Creek Storm Water Management Facility 4801	Acquire						X		520

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Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2018	Land Acquisition for Etobicoke Creek Storm Water Management Facility 5001	Acquire						X		260
2018	Land Acquisition for Mimico Creek Storm Water Management Facility 4802	Acquire						X		430
2018	Etobicoke Creek Storm Water Management Facility 4801 - East of Bramalea Road, South of Hydro Corridor	Construct						X		760
2018	Etobicoke Creek Storm Water Management Facility 5001 - North of Derry Road East, East of Bramalea Road	Design and Construct						X		820

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Project Listing

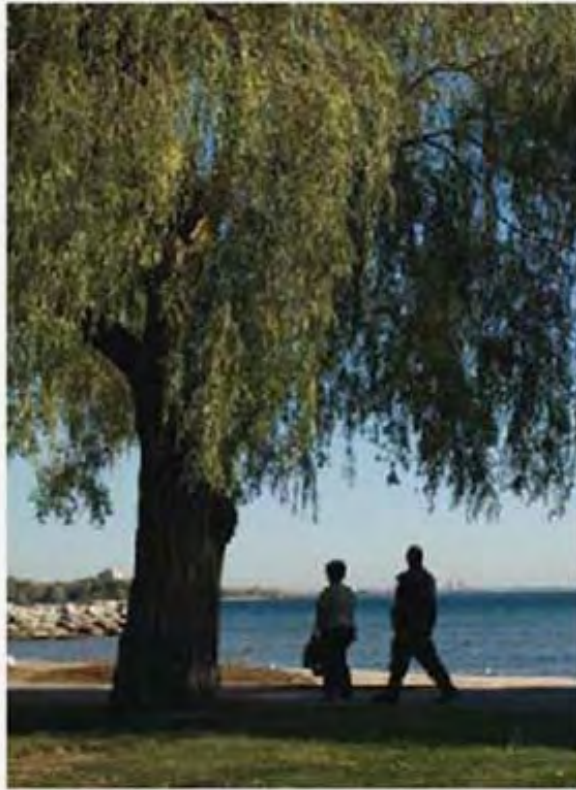
Program: Storm Drainage

Storm Drainage

Year	Project	Description	Flood Control	Erosion Control	Relief Storm Sewer	Culvert Improvement	Channel Improvement	Quality and/or Quantity Facilities	Other	Net Cost ('000's)
2018	Monitoring and Minor Modification of Storm Water Management Facilites - Various Locations	Study						X		80
2018	Retrofit Cooksville Creek Storm Water Management Pond 3701 - North of Bristol Road between McLaughlin Road and Hurontario Street	Design and Construct						X		6,040
Total										77,030

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Not Funded



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Roads, Storm Drainage and Watercourses
 2009 - 2018 Not Funded - Net Capital Expenditures By Program
 (000's)

Service/Program	2009 Budget	2010 Budget	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast	2016 Forecast	2017 Forecast	2018 Forecast	Total	Funding Sources
Other Engineering	\$ 2,750	\$ 15,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 4,860	\$ 0	\$ 0	22,610	TX-CRF
Major Roads	1,900	0	0	0	0	0	0	0	0	0	1,900	
Roadways Rehabilitation - Residential Roads, Major Roads and Industrial Roads	4,253	5,968	5,918	5,082	4,775	4,825	4,204	4,854	4,600	4,600	49,079	TX-RIMRF
Storm Drainage	0	0	0	0	0	0	3,890	0	480	0	4,370	TX-CRF
Total - Not Funded	8,903	20,968	5,918	5,082	4,775	4,825	8,094	9,714	5,080	4,600	77,959	