

**Roads, Storm Drainage  
and Watercourses  
Business Plan**

**2011-2014**



# Vision

To be a leader in delivering and managing safe, functional municipal transportation and storm water infrastructure



2011-2014

# Business Plan & Budget

City of Mississauga, Ontario, Canada

## Mission

- **To plan, develop, construct and maintain a multi-modal transportation system** which efficiently and safely moves people and goods, respects the environment, supports the development of Mississauga as a 21st Century city and serves the municipality's social, economic and physical needs
- **To plan, develop, construct and maintain a storm water management system** which safeguards public and private infrastructure and property from erosion and flooding and enhances water quality



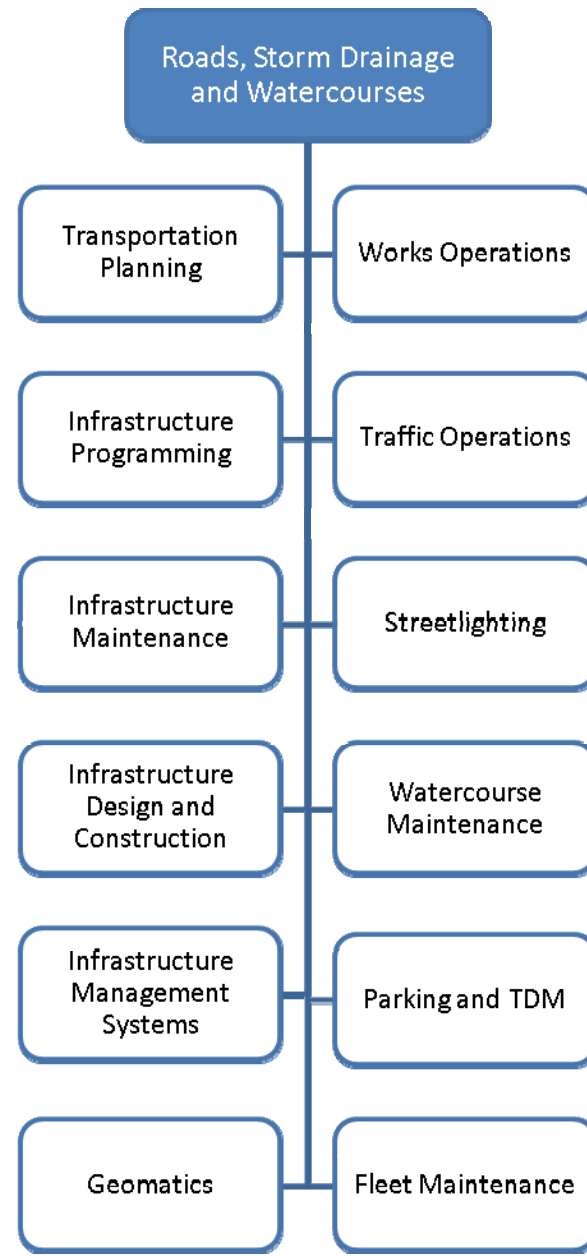
2011-2014

# Business Plan & Budget

City of Mississauga, Ontario, Canada



## Service Delivery Model



# Achievements

- 2010 Ontario Public Works Association – Project of the Year Over \$10 Million – Burnhamthorpe Road West Bridges over the Mullet Creek & Credit River
- 2010 Smart Commute Regional and Mississauga Employer of the Year
- 2010 North American Salt Institute Award (New Facility)
- 2009 Canadian Public Works Association - National Public Works Week (Metro Centre Award)
- 2009 North American Salt Institute Award (Continuity of Good Practice for Salt Storage)



# Achievements

Over last 2 years:

- 103 km of roads resurfaced
- 7000 metres of noise barriers replaced
- 30 km of new sidewalks and trails installed
- Cycling Master Plan
- Square One Drive extension EA
- Burnhamthorpe Road EA east of Arista Way
- Elm Drive design for low impact development
- Living Wall pilot project





# Opportunities and Challenges

- Aging infrastructure
- Becoming a mature, urbanized City
- Growth in municipalities to the north and west
- Increasing demand for multi-modal transportation
- Pursuit of higher order transit
- Climate change and environmental accountability



# Current Service Levels

**Average Road Network Condition** - Maintain the road network at an average Overall Condition Index of 70, or “Good” rating

**Infrastructure Programming** - Develop appropriate ten year Capital Budget in accordance with lifecycle asset management practices and meet budget preparation and construction timelines

**Capital Construction** - Adhere to all provincial standards and codes for construction and safety

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

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

**Fleet Services** - Ensure that vehicles and equipment are ready when required

**Geomatics** - Collect and maintain geographic information and core data on City assets to support service expectations and critical business decision system

**Parking and TDM** - Implement the City Centre Parking Strategy





# Current Service Levels

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

**Minimum Maintenance Standards** - Meet or exceed Provincial Minimum Maintenance Standards for the city's roadways and related assets

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

**Streetlighting** - Maintain and ensure the operation of the streetlight network in accordance with established service response times

**Permits** – Review and process permit applications in accordance with city standards

**Traffic Management** - Manage traffic operations in accordance with provincial regulations and design standards

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

**Winter** - For an average winter storm, clear major arterial and collector roads within twelve hours after the end of the storm; clear residential roads, priority sidewalks and bus stops within twenty-four hours after the storm ends

2011-2014

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City of Mississauga, Ontario, Canada

## Engaging our Customers

- Public meetings
- The City's website
- Door flyers
- National Public Works Week
- 311 Call Centre



# Performance Measures

## Measures for Roads, Storm Drainage and Watercourses

	Objective	Measure	2008 Actual	2009 Actual	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned
Financial	Without compromising public safety continue to find efficiencies in day to day operations while providing consistent service levels.	Average Road Maintenance Operating Cost Per Lane Km	\$1,552	\$1,989	\$2,000	\$2,000	\$2,000	\$2,000	\$2,500
		Average Storm Water Management Operating Cost per Km of Storm Sewer	\$1,067	\$1,235	\$1,300	\$1,300	\$1,350	\$1,400	\$1,400
		Average Winter Maintenance Operating Cost Per Lane Km	\$4,356	\$2,877	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500
	Planned increase in parking revenues over time with the introduction of new parking facilities	Annual Gross Parking Revenues	\$182,357	\$209,204	\$255,000	\$709,000	\$1,031,000	\$1,109,000	\$1,157,000





# Performance Measures

Measures for Roads, Storm Drainage and Watercourses

	Objective	Measure	2008 Actual	2009 Actual	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned
Customers	Citizen Satisfaction	Average citizen satisfaction rating for roads, traffic and environmental planning	7.1	7.1	7.5	7.5	8	8	8
Employees	Employee Satisfaction	Overall employee engagement for Transportation and Works	65%	65%	66%	67%	68%	69%	70%
		Employee engagement survey participation for Transportation and Works	45%	45%	48%	48%	51%	51%	55%
		Employee satisfaction professional and personal development for Transportation and Works	62%	62%	63%	64%	65%	66%	67%



# Performance Measures

## Measures for Roads, Storm Drainage and Watercourses

Internal Business Processes	Objective	Measure	2008 Actual	2009 Actual	2010 Planned	2011 Planned	2012 Planned	2013 Planned	2014 Planned
	Adhere to planned asset condition levels while maintaining public safety	Percentage of Roads in Good Condition Or Better	81%	77%	76%	75%	74%	73%	72%
		Percentage of Bridges in Good Condition Or Better	87%	90%	90%	90%	90%	90%	90%
	Move traffic efficiently, volume to capacity ratio	Percentage of City owned intersections that function at or above capacity	14%	14%	14%	15%	15%	15%	15%
	Traffic Safety	Number of Collisions per 1000 population	8	8	8	8	8	8	8
	Adhere to operational service levels	Percentage of Time that Winter Response Times Were Met	100%	100%	100%	100%	100%	100%	100%
	Adhere to Green Fleet Plan	Percentage of scheduled fleet converted to Green Fleet Standards	70%	80%	90%	100%	100%	100%	100%



# Goals Of This Plan

## **Asset Management**

- Maintain state of good repair for infrastructure
- Comply with legislative changes (Minimum Maintenance Standards and Accessibility)
- Leverage technology to further integrate Infrastructure Asset Management Strategy

## **Multi-Modal Transportation Network**

- Transportation network planning
- Develop and implement the Transportation Master Plan
- Implement the Cycling Master Plan

## **Greening – Environmental Stewardship**

- Implement lot level storm water quality measures
- Utilize alternative winter de-icing materials

# Goals Of This Plan

## Continuous Improvement

- Implement cost efficiencies
- Advance the Traffic Management Centre
- Review opportunities for partnerships in parking infrastructure
- Develop a Service Area communications strategy
- Implement a new works facility

## Human Resources

- Enhance staff skill set through training and mentor staff for succession planning
- Promote cross-departmental staff teams for project delivery
- Attract talented multi-disciplinary people
- Provide opportunities to encourage innovative and creative thinking



2011-2014

# Business Plan & Budget

City of Mississauga, Ontario, Canada



## Proposed Service Changes



# Budget Summary Table

## Drivers of Operating Costs

Description (\$ 000's)	2011	2012	2013	2014
Prior Year Budget	63,768	65,599	69,140	72,655
<b>Base Changes &amp; Impact of Capital Projects</b>				
Base Changes	2,235	2,692	2,458	2,012
Impact of New Capital Projects	10	10	0	0
<b>Continuous Improvements</b>				
Efficiencies	(1,882)	0	50	(50)
Budget Reductions	(53)	0	0	0
<b>Total Changes to Base and Continuous Improvement</b>	<b>310</b>	<b>2,702</b>	<b>2,508</b>	<b>1,962</b>
<b>Total Cost to Deliver Our Existing Services</b>	<b>64,078</b>	<b>68,301</b>	<b>71,648</b>	<b>74,617</b>
<b>Proposed Changes</b>				
Growth Driven Initiatives	192	47	22	22
New Service Level/New Initiatives - Funded from Tax or Reserves	1,329	792	985	703
New Revenues	0	0	0	0
<b>Total - Proposed Changes</b>	<b>1,521</b>	<b>839</b>	<b>1,007</b>	<b>725</b>
<b>Total Budget</b>	<b>65,599</b>	<b>69,140</b>	<b>72,655</b>	<b>75,342</b>

Note: Numbers may not balance due to rounding



# Base Changes

## Highlights of Base Budget Changes

Description (\$ 000's)	FTE	2011	2012	2013	2014	Total Net Costs
Labour cost increases (reflects performance pay, economic adjustments, and fringe benefit changes).	0.0	951	1,264	1,157	740	4,112
Labour Gapping	0.0	(263)	0	0	0	(263)
Winter - Contractor & Professional Services	0.0	550	572	570	593	2,285
Winter - Materials, Supplies & Other Services	0.0	199	206	215	223	843
City Centre On-Street Paid Parking- Revenue Adjustment-Budget Request-375	0.0	500	0	0	0	500
Hydro Streetlighting, Traffic Signals & Bollards	0.0	100	100	100	100	400
Reduction in Development Revenue - Engineering Fees-Budget Request-372	0.0	100	25	25	25	175
Corporate Asset - Civic Addresses and Street Names-Budget Request-160	0.0	0	50	(50)	0	0
Utilities - Hydro	0.0	(7)	11	8	8	20
On-Street Paid Parking & BIA Parking Facilities-Budget Request-280	1.0	(18)	13	(14)	(14)	(33)
City Centre Parking (Transfer to reserve CC24012)	0.0	(350)	0	0	0	(350)
<b>Total Base Budget Highlights</b>	<b>1.0</b>	<b>1,762</b>	<b>2,241</b>	<b>2,011</b>	<b>1,675</b>	<b>7,689</b>

Note: Numbers may not balance due to rounding





# Base Changes-Due To Capital Projects

## Operating Impacts from Capital Projects

Description (\$ 000's)	BR #	FTE	2011	2012	2013	2014	Total Net Costs
Update and Enhancement of the Rain Gauge Network	272	0.0	10	10	0	0	20
<b>Total Operating Budget Impact</b>		<b>0.0</b>	<b>10</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>20</b>

Note: Numbers may not balance due to rounding



# Continuous Improvement

## Efficiencies

Description (\$ 000's)	BR #	FTE	2011	2012	2013	2014	Total Net Costs
Leaf Collection - improving the efficiency of the operation	263	-2.2	(100)	0	0	0	(100)
Street Cleaning - Improving efficiency	264	-1.1	(350)	0	0	0	(350)
Winter Maintenance Review	265	-3.0	(1,282)	0	0	0	(1,282)
Salt Management - Alternative de-icing materials	266	0.0	(50)	0	0	0	(50)
Budget Reduction - Professional Services and Administration (RSDW Service Area)	512	0.0	(100)	0	0	0	(100)
Sharing spatial information in project areas using ProjectWise application	274	0.0	0	0	50	(50)	0
<b>Total Operating Budget Impact</b>		<b>(6.2)</b>	<b>(1,882)</b>	<b>0</b>	<b>50</b>	<b>(50)</b>	<b>(1,882)</b>

Note: Numbers may not balance due to rounding

# Continuous Improvement

## Recommended Program Reductions

Description (\$ 000's)	BR #	FTE	2011	2012	2013	2014	Total Net Costs
Reductions in Business Services Division - Transportation and Works Department *	533	0.0	(53)	0	0	0	(53)
<b>Total Operating Budget Impact</b>		<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

\*Impacts reflected in Corporate Business Services





# New Initiatives

## Increased Service Levels/New Initiatives - Funded from Tax

Description (\$ 000's)	BR #	FTE	2011	2012	2013	2014	Total Net Costs
Cycling Master Plan Implementation	211	4.0	502	386	329	284	1,501
Traffic Signal Enhancement Installation	354	0.0	50	50	50	50	200
Watercourse Management Implementation	382	3.0	126	288	29	0	443
Transportation Demand Management & Smart Commute Support **	213	0.0	80	0	(40)	0	40
Amended Minimum Maintenance Standards - Sign Inventory, Sidewalk Patrol, Street Lighting	270	3.3	546	0	0	0	546
Clarkson Air Quality Improvements	442	0.0	25	0	0	0	25
Integrated Road Safety Program (IRSP)	335	1.0	0	68	43	0	111
Expanded use of Hansen IMS to enhance T&W permit and dispatch services **	359	0.0	0	0	12	(1)	11
Traffic Management Centre	222	8.0	0	0	362	370	732
Mississauga Storm Water Quality Control Strategy Implementation	401	0.0	0	0	200	0	200
<b>Total Operating Budget Impact</b>		<b>19.3</b>	<b>1,249</b>	<b>792</b>	<b>1,013</b>	<b>704</b>	<b>3,809</b>

\* A portion of these impacts reflected in Transit Service Area

\*\*Impacts reflected in corporate Business Services

# Growth Changes

## Growth Driven Service Costs

Description (\$ 000's)	BR #	FTE	2011	2012	2013	2014	Total Net Costs
Infrastructure Asset Management Program Implementation - New Asset Inventories & Reporting	64	1.0	43	53	20	20	136
City Centre Off-Street Parking	146	2.0	100	(55)	2	2	49
Integrated Surveys and Control Network	31	1.0	49	49	0	0	98
<b>Total Operating Budget Impact</b>		<b>4.0</b>	<b>192</b>	<b>47</b>	<b>22</b>	<b>22</b>	<b>283</b>

Note: Numbers may not balance due to rounding



# 4 Yr Budget Summary

## 4 Year Budget and Forecast

(\$ 000's)	2010 Budget	2011 Budget	% Change	2012 Budget	% Change	2013 Forecast	% Change	2014 Forecast	% Change
Labour Costs	25,602	26,395	3.1%	28,090	6.4%	29,760	5.9%	30,904	3.8%
Other Operating Expenses	43,784	44,350	1.3%	46,328	4.5%	48,128	3.9%	49,629	3.1%
Total Costs	69,386	70,745	2.0%	74,418	5.2%	77,888	4.7%	80,533	3.4%
Total Revenues	(7,824)	(7,307)	-6.6%	(7,604)	4.1%	(7,657)	0.7%	(7,680)	0.3%
<b>Net Cost</b>	<b>61,563</b>	<b>63,438</b>	<b>3.0%</b>	<b>66,814</b>	<b>5.3%</b>	<b>70,232</b>	<b>5.1%</b>	<b>72,853</b>	<b>3.7%</b>
<b>Allocations</b>	<b>2,206</b>	<b>2,161</b>	<b>-2.0%</b>	<b>2,325</b>	<b>7.6%</b>	<b>2,423</b>	<b>4.2%</b>	<b>2,488</b>	<b>2.7%</b>
<b>Net of Allocations</b>	<b>63,768</b>	<b>65,599</b>	<b>2.9%</b>	<b>69,140</b>	<b>5.4%</b>	<b>72,655</b>	<b>5.1%</b>	<b>75,342</b>	<b>3.7%</b>

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# 4 Yr Budget Summary

## 2011 - 2014 Net Operating Budget by Program

Program Expenditures (\$ 000's)	2011 Budget	% Change	2012 Budget	% Change	2013 Forecast	% Change	2014 Forecast	% Change
Maintenance Control	7,784	-2.7%	8,218	5.6%	8,581	4.4%	8,796	2.5%
Sewer Bridges & Watercourses	1,363	13.1%	1,582	16.1%	1,586	0.2%	1,590	0.2%
Winter Maintenance	18,669	-2.8%	19,463	4.3%	20,265	4.1%	21,098	4.1%
Roads and Sidewalk Maintenance	4,703	4.9%	4,832	2.8%	4,887	1.1%	4,942	1.1%
Cleaning and Litter Pickup	3,647	-6.7%	3,720	2.0%	3,792	1.9%	3,864	1.9%
Development Construction	1,088	3.6%	1,148	5.5%	1,207	5.2%	1,249	3.5%
Engineering & Capital Works	349	149.4%	486	39.1%	623	28.2%	695	11.6%
Corporate Fleet Maintenance	1,341	14.7%	1,490	11.1%	1,639	10.0%	1,748	6.7%
Transportation & Infrastructure	4,688	16.7%	5,450	16.3%	6,262	14.9%	6,730	7.5%
Streetlighting	7,149	1.4%	7,249	1.4%	7,349	1.4%	7,449	1.4%
Crossing Guards	2,473	1.7%	2,487	0.6%	2,501	0.6%	2,513	0.5%
Traffic Management	9,292	8.8%	9,684	4.2%	10,413	7.5%	11,045	6.1%
Parking Facilities	(108)	-74.9%	(145)	33.9%	(152)	4.6%	(160)	5.5%
Administration	3,163	5.5%	3,477	9.9%	3,704	6.5%	3,784	2.1%
<b>Net Program Impact</b>	<b>65,599</b>	<b>2.9%</b>	<b>69,140</b>	<b>5.4%</b>	<b>72,655</b>	<b>5.1%</b>	<b>75,342</b>	<b>3.7%</b>

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# 2011 Budget Summary

## 2011 Net Budget by Program

Program Expenditures (\$ 000's)	2009 Actual	2010 Budget	2011 Base Budget	Base Change %	2011 Program Changes	2011 Request	2011 Change	2011 Change (%)
Maintenance Control	9,542	7,998	7,843	-1.9	(59)	7,784	(213)	-2.7
Sewer Bridges & Watercourses	1,638	1,206	1,303	8.1	60	1,363	158	13.1
Winter Maintenance	14,605	19,213	19,838	3.2	(1,169)	18,669	(545)	-2.8
Roads and Sidewalk Maintenance	4,065	4,483	4,703	4.9	0	4,703	220	4.9
Cleaning and Litter Pickup	2,993	3,908	4,097	4.9	(450)	3,647	(260)	-6.7
Development Construction	1,027	1,050	1,088	3.6	0	1,088	38	3.6
Engineering & Capital Works	(677)	140	349	149.4	0	349	209	149.4
Corporate Fleet Maintenance	1,087	1,169	1,341	14.7	0	1,341	171	14.7
Transportation & Infrastructure Planning	2,913	4,018	4,210	4.8	478	4,688	670	16.7
Streetlighting	7,050	7,049	7,149	1.4	0	7,149	100	1.4
Crossing Guards	2,379	2,432	2,473	1.7	0	2,473	41	1.7
Traffic Management	7,646	8,537	8,775	2.8	517	9,292	755	8.8
Parking Facilities	90	(432)	(208)	51.8	100	(108)	323	74.9
Administration	2,811	2,999	3,071	2.4	92	3,163	165	5.5
<b>Net Program Impact</b>	<b>57,170</b>	<b>63,768</b>	<b>66,030</b>	<b>3.5%</b>	<b>(431)</b>	<b>65,599</b>	<b>1,831</b>	<b>2.9%</b>

Note: Numbers may not balance due to rounding.



# Human Resources

## Human Resources Requirement

Description	Total FTE
2010 Restated Complement	417.5
2011 Budget Requirement	420.9
2012 Budget Requirement	425.6
2013 Forecast	430.6
2014 Forecast	434.6





# Proposed Staff Increase

Proposed Changes to Staff Complement			
Position	SN #	FTE	Year
Land Surveyor	31	1	2011
GIS Specialist – Storm Sewer Network	64	1	2011
Parking Permit Clerk	146	1	2011
Parking Maintenance and Collections	146	1	2011
Cycling Technologist	211	1	2011
Trail Route Inspector (Community Services)	211	1	2011
Leaf Collection Temporary Labour Hours	263	-2.16	2011
Street Cleaning Temporary Labour Hours	264	-1.08	2011
Winter Maintenance Temporary Labour Hours	265	-3	2011
Sign Technician (Minimum Maintenance Standards)	270	1	2011
Labourer (Sign Maintenance)	270	1	2011
Sidewalk and Signs Inspectors - Summer Students	270	1.33	2011
Water Resources Engineer (Part Time/Contract)	382	-1	2011
Water Resources Engineer (Conversion to Full Time)	382	1	2011
Environmental Co-op Student - Watercourses	382	0.33	2011
<b>Total Net Changes (Excluding Trail Inspector)</b>		<b>2.42</b>	

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City of Mississauga, Ontario, Canada

## Technology

- Advance the Traffic Management Centre and Intelligent Transportation Systems (ITS)
- Upgrade asset management software and expand use of system to complete inventories and automate capital project management
- Expand use of Automated Vehicle Locator (AVL) and GPS - Upgrade/replace supporting equipment and networks
- Develop on-line business transactions/streamline various business processes



# Facilities

- **201 City Centre Dr.** - reconfigure office space to support Cycling Office and watercourse management
- **3185 Mavis Road** - reconfigure administrative building to support the growth required for Traffic Management Centre
- **South-East Works facility** - begin construction
- **North-Central Works facility** - begin planning and design for the new facility



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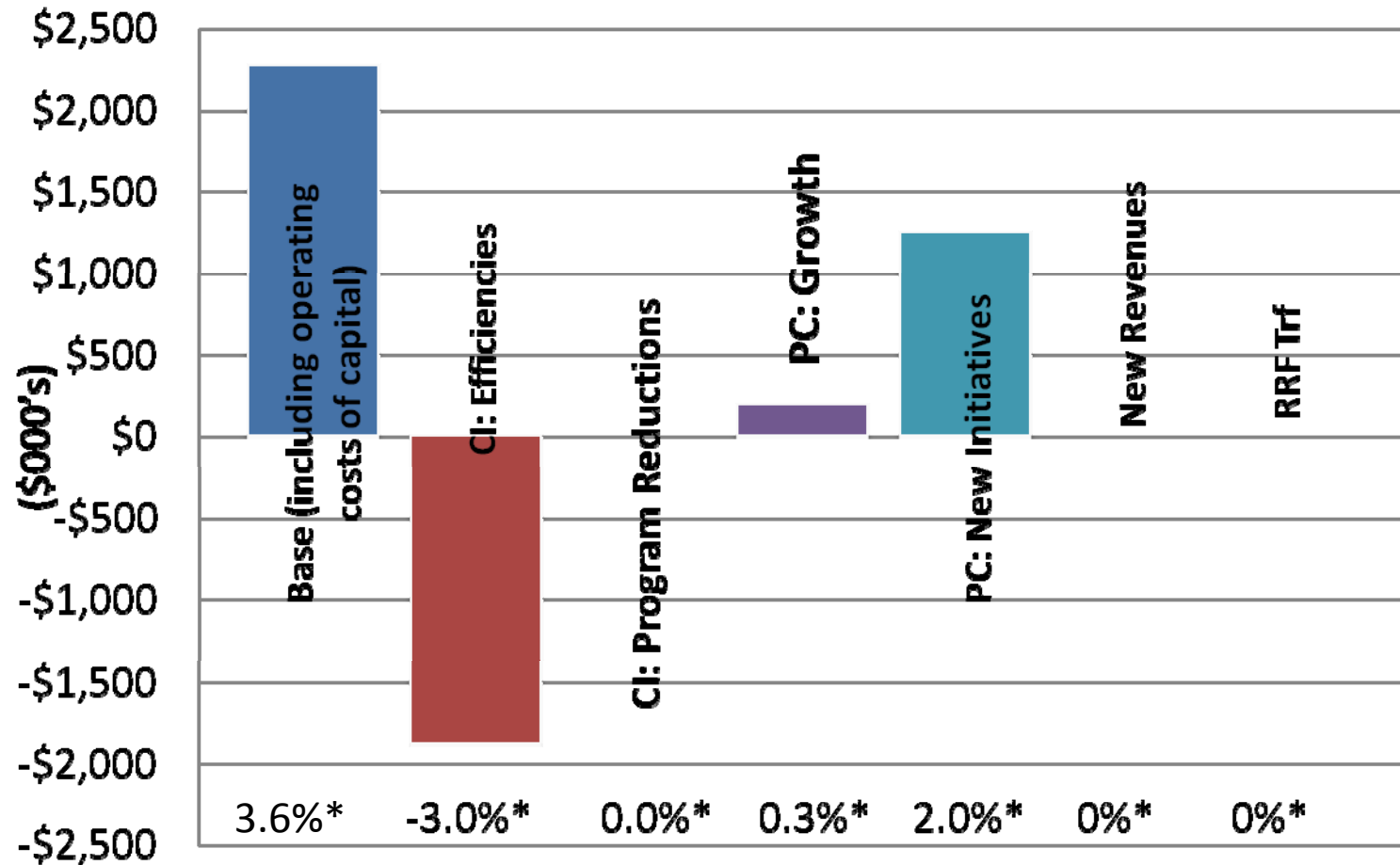
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## Summary of 2011 Changes

(2.9% Increase from 2010 Net Operating Budget)



\* represents the % increase or decrease relative to the 2010 Net Operating Budget

2011-2014

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City of Mississauga, Ontario, Canada



## 2011 Operating Highlights





# Parking and TDM

## Parking



## TDM



# Winter Maintenance

2010 Approved \$19.2M

2011 Proposed \$18.7M

Net Decrease (\$545k)

- Winter maintenance review -\$1.159M
  - Reduced equipment by 6 City owned sidewalk tractors and 10 City owned spreader units
- Salt management -\$ 10k
- Labour adjustments -\$ 125k
- Contract increases \$ 527k
- Sand and salt materials increases \$ 199k
- Automatic vehicle locator \$ 25k



# Cleaning and Litter Pick Up

2010 Approved \$3.9M

2011 Proposed \$3.6M

**Net Decrease (\$260k)**

- Street cleaning efficiency -\$ 345k
  - reduction in labour hours 1.1 FTE
  - reduction in contracted resources
- Leaf collection efficiency -\$ 90k
  - reduction in # of collections from 3 to 2
  - reduction in labour hours 2.2 FTE and contract services
- Salt management savings -\$ 40k
- Clarkson air quality \$ 25k
- Labour adjustments \$ 125k
- Contract pressures (graffiti, waste, leaf) \$ 65k

# Sewer, Bridge & Watercourse Maintenance

2010 Approved \$1.2M

2011 Proposed \$1.4M

**Net Increases \$158k**

- Watercourse management \$ 60k
  - Contracted watercourse maintenance
- Labour adjustments \$ 63k
- Preventative maintenance/bridge cleaning \$ 35k



# Traffic Management

2010 Approved \$8.5M

2011 Proposed \$9.3M

Net Increases \$755K

- Minimum Maintenance Standards \$ 467k
  - Sign inspection - 2 FTE's
  - Vehicle and equipment (GPS, reflectometer)
- Operating impact of traffic signal installation \$ 50k
- Labour adjustments \$ 117k
- Traffic system and signal maintenance \$ 41k
- Traffic signal line communications \$ 51k





# Traffic Management

## Funded from Tax

Description (\$ 000's)	BR #	FTE	2011	2012	2013	2014	Total Net Costs
Traffic Signal Enhancement	354	0.0	50	50	50	50	200
Integrated Road Safety Program (IRSP)	335	1.0	0	68	43	0	111
Traffic Management Centre	222	8.0	0	0	362	370	732

## 2012

### IRSP - \$68K

- \$43K for Labour to coordinate program
- \$25K for data collection and analysis

## Post 2013

### Traffic Management Centre Implementation

- 4 FTE's Proposed in 2013
- 4 FTE's Proposed in 2014

# Road and Sidewalk Maintenance

2010 Approved \$4.5M

2011 Proposed \$4.7M

**Net Increases \$220k**

- Labour adjustments \$ 105k
- Contract services \$ 90k  
(reflects actual costs, outstanding work, cost increases)
- Asphalt material cost adjustments \$ 25k





# Maintenance Control

2010 Approved \$8.0M

2011 Proposed \$7.8M

Net Decrease \$213k

- |   |         |
|---|---------|
| • Winter maintenance review                           | -\$123k |
| • Reduction in part-time labour equivalent to 3 FTE's |         |
| • Minimum Maintenance Standards                       | \$ 79k  |
| • 4 additional students and equipment                 |         |
| • Leaf collection efficiency                          | -\$ 20k |
| • contracted leaf pick up hours                       |         |
| • Street cleaning efficiency                          | -\$ 5k  |
| • Labour adjustments                                  | \$ 59k  |
| • Utility and other cost adjustments                  | -\$ 15k |



2011-2014

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## Streetlighting

2010 Approved - \$7.049M

2011 Proposed - \$7.149M

Net Increases \$100k

- Hydro cost increases \$100k





# Transportation & Infrastructure Planning

2010 Approved \$4.0M

2011 Proposed \$4.7M

Net Increase \$670K

- TIP professional services reduction -\$ 100k
- Cycling Office \$ 502k
- Watercourse management \$ 66k
  - Water Resource Engineer and co-op student
- Development revenue reduction \$ 100k
- Rain gauge update \$ 10k
- Labour adjustments \$ 101k
- Other operating adjustments \$ 7k

# Cycling

## Funded from Tax

Description (\$ 000's)	BR #	FTE	2011	2012	2013	2014	Total Net Costs
Cycling Master Plan Implementation	211	4.0	502	386	329	284	1,501

- 2 FTE - \$92k (mid year start)
  - Cycling Technologist
  - Trail Inspector for Community Services
- Contracts, professional services, materials - \$410k
  - 30 km of new facilities annually: lane markings and signage component
  - Bike racks and storage facilities
  - Education and safety programs
  - Road, boulevard, path and trail maintenance



# Watercourse Management

## Funded from Tax

Description (\$ 000's)	BR #	FTE	2011	2012	2013	2014	Total Net Costs
Watercourse Management	382	3.0	126	288	29	0	443

## 2011

- 1 FTE – Water Resource Engineer \$55K (mid-year start)
- additional co-op student 4 month term watercourse inspection - \$11K
- additional maintenance cost \$60K (reflected in Works maintenance program)

## 2012

- 1 FTE - Storm Drainage Technician and balance of funding for Water Resource Engineer- \$84k
- 2 additional co-op students - \$24K
- additional maintenance costs \$180k (reflected in Works maintenance program)



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## Capital Budget

# Capital Summary

## 2011 - 2020 Total Net Capital Program

Program Expenditures (\$ 000's)	2011 Budget	2012 Budget	2013 Forecast	2014 Forecast	Post 2014 Forecast	Total (\$)
Bridge & Structure Rehabilitation	4,500	4,500	4,500	4,500	27,000	45,000
Major Roads	11,231	12,148	13,620	20,958	116,990	174,947
Other Engineering	22,012	27,562	21,362	24,917	123,196	219,050
Roadway Rehabilitation	22,908	15,374	16,224	23,900	144,450	222,855
Storm Drainage	6,977	17,311	19,710	12,230	37,050	93,078
<b>Total Net Expenditures</b>	<b>67,628</b>	<b>76,895</b>	<b>75,416</b>	<b>86,505</b>	<b>448,686</b>	<b>755,130</b>

Note: Numbers may not balance due to rounding.

**Annual Average \$75.5M**  
**10 -Year increase from previous forecast \$55.5M**

**Note: The 2011 budget request is \$3.7M lower then the 2010 forecast for 2011**





# Bridge & Structure Rehabilitation Highlights

2011-2014 Capital Budget Request • Reflects recommended annual state of good repair funding

(\$000's)	2011	2012	2013	2014
Bridge & Structure Rehabilitation	4,500	4,500	4,500	4,500

## 2011

- Lakeshore Road East over Applewood Ck.
- Lakeshore Road East over Serson Ck.
- Tannery Street over Mullet Ck.
- St. Mary's Avenue over Applewood Ck.
- Eglinton Avenue West over the Credit River





# Roadway Rehabilitation Highlights

2011-2014 Roadway Rehabilitation • State of Good Repair Study to be completed in 2011

(\$000's)	2011	2012	2013	2014
Roadway Rehabilitation	22,908	15,374	16,224	23,900

## 2011

- Additional \$5.8M to restore Region's watermain replacement roads
- 67 lane km of residential roads
- 30 lane km of arterial, collector, industrial roads
- 2011-2013 ISF base reduction applied







# 2011-2014 Highlights

## Major Roads

### 2011-2014 Capital Highlights

Description (\$000's)	2011 Budget	2012 Budget	2013 Forecast	2014 Forecast
Duke of York Boulevard/Square One Drive Roundabout	2,000	0	0	0
Creditview Road Bridge Widening at the Credit River	3,000	0	0	0
Burnhamthorpe Road West Through City Centre (Arista Way to Mavis Rd) (BR 80)	4,750	0	0	0
Main Street (Baif Road) - Burnhamthorpe Road West to Webb Drive	0	500	0	0
Ninth Line Widening (Derry Road to North Limits)	0	9,400	0	0
Creekbank Road (3 phases)	0	0	2,362	1,710
Drew Road – Dixie Road to Tomken Road (Phase 1, and Structure)	0	0	6,000	8,500
McLaughlin Road – Bristol Road to Britannia Road West	0	0	4,260	0
Courtney Park Drive East – Kennedy Road to Dixie Road	0	0	0	7,980
Centreview Drive Widening – Duke of York Boulevard to Rathburn Road West	0	0	0	1,270

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## 2011-2014 Highlights Major Roads

### 2011 Studies

- Transportation Master Plan - \$50k
- DT 21- Transportation Functional Design - \$200
- Preliminary Engineering Studies - \$83K
- EA/Grade Separation Feasibility Study for Ninth Line from Derry Road West to North Limit - \$250k



# 2011-2014 Highlights

## Other Engineering

(\$000's)	2011 Budget	2012 Budget	2013 Forecast	2014 Forecast
Noise Attenuation Barriers	1,850	3,000	3,000	1,556
Cycling Program	3,770	3,770	3,770	3,770
Sidewalk Program including transit sidewalk priority	2,244	2,244	2,244	2,244
Municipal Parking	300	298	460	160
Salt Management including study for permanent snow storage sites	200	2,550	50	7,150
Streetlighting	1,417	1,417	1,417	1,417
Traffic Signals	3,717	2,492	4,492	2,492



# 2011-2014 Highlights

## Other Engineering

### Noise Barriers

- Applied for additional ISF works at \$2.04M
- Recommend: If ISF work approved, reduce 2011 budget by \$1.8M (tax)
- Proposed budget funds NOW and 1-5 year replacement program over 3 years (\$50k still needed to update needs study)

### Sidewalks

- 2011 - Front ending DC funding for new sidewalks to support transit accessibility
- Additional \$1.25 M annually for the next 4 years



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## 2011-2014 Highlights Other Engineering

### Traffic Signals -10 year program includes

- Traffic Management Centre
- Traffic signal LED replacement
- New traffic signal installation
- Transit signal priority and fire vehicle pre-emption
- Field Equipment Replacement - Traffic Controllers
- ITS Equipment
- Accessible pedestrian timers
- Uninterruptible power supply
- Pedestrian count down timers



# 2011-2014 Highlights

## Storm Drainage

### 2011-2014 Capital Budget Request

(\$000's)	2011	2012	2013	2014
Storm Drainage	6,977	17,311	19,710	12,230

### 2011 Projects

#### Cooksville Creek

- Engineering and design studies \$3M
- Various flooding and erosion control improvements advanced - \$1.47M
- Basement flood remediation and action plan - phase II - \$250k

#### Other creek and storm water projects

- Applewood Creek erosion project
- Applewood Creek culvert improvement
- Sawmill Creek erosion projects
- Sheridan Creek erosion project
- Mullet Creek Arch Pond water quality retrofit



# Unfunded Pressures

- Major roads deferred beyond 10 year plan due to decreasing DC's
- Road rehabilitation approximately \$6.5M annually
- Noise barriers on major collector roads
- Grade separations deferred
- Storm drainage
  - Cooksville Creek flooding mitigation and downspout disconnection program and engineering study recommendations
  - Expansion of watercourse management programs city wide
  - Limited funding for erosion control projects
- Traffic Management Centre – space requirement
- Streetlighting retrofit
- Traffic calming



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## Unfunded

### **Safe Driving, Traffic Safety and Accessibility Advisory Committees**

"Budget Committee be requested to allocate funding for one full-time contract staff position in the Traffic Engineering and Operations section of the Transportation and Works Department's 2011 operating budget and business plan, to coordinate the implementation of a traffic calming pilot project, as well as a \$100,000 capital budget allocation to fund construction or purchase of components for the pilot project."







# Capital Budget Summary

## 2011 - 2014 Net Capital Detail Changes

Program Expenditures (\$ 000's)	BR #	2011 Budget	2012 Budget	2013 Forecast	2014 Forecast	Post 2014 Forecast	Total (\$)
Permanent Snow Storage Sites	267	150	2,500	0	7,100	5,400	15,150
Winter Maintenance Review	265	(50)	(50)	(50)	(50)	(300)	(500)
DT21 Transportation Functional Design Studies	350	200	200	0	0	0	400
Transit Accessibility Plan - Sidewalk Program	355	1,250	1,250	1,250	1,250	(2,894)	2,106
On-Street Paid Parking and BIA Parking Facilities	280	300	298	460	160	10,000	11,218
Transportation Master Plan	121	50	0	0	0	0	50
Roadway Rehabilitation Program	63	5,800	0	0	0	0	5,800
Cooksville Creek Capital Projects	404	4,480	1,180	5,130	3,360	(11,150)	3,000
Bridge/Culvert Rehabilitation Program	94	2,175	4,175	2,375	2,375	18,745	29,845
Noise Attenuation Barriers	62	350	0	2,622	1,178	3,563	7,713
Amended Minimum Maintenance Standards - Sign Inventory, Sidewalk Patrol, Street Lighting	270	200	0	0	0	0	200
Update and Enhancement of the Rain Gauge Network	272	67	21	0	0	0	88



# Capital Budget Summary

## 2011 - 2014 Net Capital Detail Changes

Program Expenditures (\$ 000's)	BR #	2011 Budget	2012 Budget	2013 Forecast	2014 Forecast	Post 2014 Forecast	Total (\$)
Integrated Surveys and Control Network	31	35	35	35	35	210	350
Storm Drainage Network Modelling	403	(150)	(500)	250	250	0	(150)
Mississauga Storm Water Quality Control Strategy Implementation	401	0	250	250	250	1,500	2,250
Burnhamthorpe Road through City Centre (Arista Way to Mavis Road)	80	1,250	(2,500)	0	0	30,000	28,750
Expanded use of Hansen IMS to enhance T&W permit and dispatch services	359	0	0	116	0	0	116
New North Central Works Yard	398	0	0	50	50	100	200
Traffic Signal Capital Installation	354	0	0	0	0	1,500	1,500
Goreway Drive Grade Separation	N/A	(2,000)	(4,000)	0	0	8,000	2,000
Drew Road Grade Separation - Construction	N/A	0	0	0	(14,000)	14,000	0
Creekbank Road Extension Structure over Hwy 401	N/A	0	0	(11,302)	0	11,302	0
Dundas Street West - Winston Churchill Boulevard to Glen Erin Drive	N/A	0	0	0	0	(4,390)	(4,390)



# Capital Budget Summary

## 2011 - 2014 Net Capital Detail Changes

Program Expenditures (\$ 000's)	BR #	2011 Budget	2012 Budget	2013 Forecast	2014 Forecast	Post 2014 Forecast	Total (\$)
Ninth Line Widening - Eglinton Avenue West to Britannia Road West	N/A	0	0	0	0	(9,010)	(9,010)
Tenth Line - Derry Road to Argentia Road	N/A	0	0	0	0	(4,850)	(4,850)
Creebank Road Extension - Enterprise Drive, Shawson Drive and Britannia Road East	N/A	(6,000)	6,000	0	0	0	0
Sheridan Creek Erosion Control - Clarkson Road to Meadow Wood Road	N/A	(1,340)	1,340	0	0	0	0
Retrofit - Mullet Creek SWM Pond #5401 - West of Argentia Road and North of Derry Road West	N/A	(3,592)	3,590	0	0	0	(2)
Mullet Creek Erosion Control - Burnhamthorpe Road West to behind Woodchuck Lane	N/A	(1,500)	1,490	0	0	0	(10)
Retrofit - Mullet Creek SWM Pond #5402 - North of Derry Road West and West of Syntex Drive	N/A	0	(7,610)	7,610	0	0	0
<b>Total Net Expenditures</b>		<b>(12,432)</b>	<b>4,810</b>	<b>7,610</b>	<b>0</b>	<b>(13,860)</b>	<b>(13,872)</b>

Note: Numbers may not balance due to rounding.

2011-2014

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# Questions?

