

Roads, Storm Drainage & Watercourses

**Budget Committee
2009 Budget**

December 2, 2008

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 and 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

Business Plan Activities

Transportation Planning	Traffic Operations & Crossing Guards
Infrastructure Planning & Programming	Parking Infrastructure Planning Operations & Maintenance
Infrastructure Design & Construction	Works Operations <ul style="list-style-type: none">– Winter Maintenance– Street Sweeping– Graffiti, Cleaning, Litter Pickup– Leaf Pickup.
Infrastructure Maintenance & Repair	
Watercourses	
Streetlighting	Fleet Maintenance

Key Performance Indicators

Objective	Measure
Provide an adequate transportation system	Volume to capacity ratio for major roads
Provide a safe transportation system	Collisions per 1000 population
Provide efficient maintenance of paved roads	Operating costs for paved roads per lane kilometre
Provide pavement condition that meets municipal objectives	Percentage of paved lane kilometres where the condition is rated as good or better

Key Performance Indicators

Continued

Objective	Measure
Provide an efficient urban storm water management program	Operating costs for urban storm water management (collection, treatment and disposal) per kilometre of drainage system
Provide for efficient winter maintenance of roads	Operating cost for winter maintenance of roadways per lane kilometre
Provide an appropriate response to winter storm events	Percentage of winter events where the response met or exceeded locally determined municipal service levels for road maintenance

2009-10 Business Plan Priorities

- **State of Good Repair for infrastructure**
- **Moving People and Goods** – Supporting transit and a multi-modal transportation network
- **Service Delivery** – Maintaining service levels and leveraging opportunities for continuous improvement in operations

2009-10 Business Plan Priorities

- **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 to further Mississauga’s strategic goals

Major Initiatives

Moving People and Goods

- **Transportation Master Plan**
 - Development of a multi-modal transportation master plan for the City
 - 2009 - \$200K included in Professional Services base budget
- **Traffic Management Centre**
 - 2008 - \$1.5M to upgrade existing system
 - 2013 - \$2.0M to establish Traffic Management Centre
- **Intelligent Transportation Systems**
 - 2009 - Implement video cameras at strategic locations and data collection sensors (volume and speed) - \$100K

Major Initiatives

Moving People and Goods (Continued)

- Traffic Signal Communications Review
 - 2009 - Explore partnerships with stakeholders to build a City Wide Communications Network for Traffic Signal System
 - 2008 – Approved \$1.6M
- Integrated Road Safety Program
 - Develop databases and analysis tools that will help to identify problem areas and prompt appropriate reviews (example: road safety audit)
 - 2009 database review
 - 2010 database update \$200K

Major Initiatives

Moving People and Goods (Continued)

- Gaps in Road Network Feasibility and EA Studies
 - 2009 - Britannia Road extension
 - 2009 - Highway 401 off ramp east of Dixie Road to connect Creebank Road
 - 2010 - Courtneypark Drive (Kennedy Road to Dixie Road Widening)

Major Initiatives

Moving People and Goods (Continued)

- Pay for Parking (TDM Initiative)
 - 2008/2009 - initial installation (115)
 - Self funded (internal loan)
- City Centre – Burnhamthorpe Road

Major Initiatives

Greening the Environment

- Environmental Management of City-Owned Property
- Salt Management Plan Initiatives
 - Implementation of advanced storage and material handling techniques in all yards 2008/2009
- Mississauga Storm Water Quality Control Strategy Update
 - Study expected to be completed early 2009 (previously funded)

Major Initiatives

State of Good Repair for Infrastructure

- Storm Drainage Network Modelling
 - Create a model to assess impacts to the network caused by factors such as land use intensification and climate change
 - 2009 develop base model
 - 2010 pilot sewer-shed \$250K
- Pavement Management Study
 - 2009 system upgrade
 - 2010 complete data analysis \$600K

Major Initiatives

State of Good Repair for Infrastructure

- Road Right-of-Way Design Standards
 - Develop multi-modal design standards for urban conditions
 - 2010 completion
- Road Cut Restorations and Monitoring
 - Final road cut restorations will be completed by City contracted forces

2009 Budget Reductions

Approved by Budget Committee

Approved Program Reductions \$825K

- Elimination of two vehicles and four FTEs' (\$200K)
- Permanent sidewalk repair funding by 50% (\$250K)
- Regular sweeping program by 50% (\$75K)
- Special pavement markings (\$100K)
- Asphalt maintenance repairs (\$100K)
- Storm drainage maintenance & repairs (\$100K)

Winter Maintenance

2008 Approved - \$14.5M

2009 Proposed - \$16.4M

Program Net Increases \$1.9M

- **Maintain Existing Service Levels \$1.2M**
 - \$930K increase due to contract pressures, and sidewalk plowing route growth
 - \$300K Salt and sand costs
 - Final year of three year contract (spring 2009)
- **Proposed improvements to priority sidewalk and bus stops (2009/2010)**
 - \$700K in 2009 (\$1.3M in 2010)
- **Savings through contracting \$60K**

Traffic Management

2008 Approved - \$7.3M

2009 Proposed - \$8.1M

Various Program Net Increases \$800K

- Labour and contract cost pressures
- Pay and display loan repayment adjustment
- Increase in traffic data count program

Streetlighting

2008 Approved - \$5.7M

2009 Proposed - \$6.9M

Various Cost Pressures Increases - \$1.2M

- Electricity cost increase
- Enersource contract negotiations decrease

Development Engineering Fees

Related engineering fees are forecasted to decline from \$406K to \$306K

TIP Professional Services

2008 Approved - \$384K

2009 Proposed - \$559K

Program Increase \$175K

- Transportation studies related to development applications/official plan review increased \$100K
- Preliminary environmental assessment of City owned sites \$75K

Staffing

New Staff - 1 Mechanic

- Recommended through Corporate Fleet Maintenance e3 Review
 - Recognize efficiency in sublet budget with net annual savings \$51K

Temporary Staff – Engineering & Works

- To align expenditures with budget and maintain existing service levels.

Capital Budget

Business Environment

Cost increases – roads and structures

- Construction tender prices rising
- 2009-2018 capital plan costs adjusted accordingly
 - ↑ 30 % Asphalt
 - ↑ 10 % Concrete
 - ↑ 35 % Structures
 - ↑ 7.5 % Storm Drainage Projects
 - ↑ 3.5 % Inflation
- Fewer projects can be funded

Business Environment

Increasing program demand

- Cycling accommodation
- Urban streetscape standards
- Municipal parking
- City Centre
- Sidewalk network completion
- Countdown timers, accessible pedestrian signals/markings
- Fewer road widenings
 - Shift from DC's to tax funding
 - Noise Barriers & Bridges

Major Roads Variance

- \$15M deferred from 10 year plan due to cost increases
- Several projects advanced to align timing with MTO
- Other projects advanced due to development pressures
- Multi year funding of large projects to assist with DC balances
 - Hurontario/401 group of projects
 - Creekbank Road (incl. Structure)
- Overall program matches DC funding availability

2009 Major Roads Highlights

2009 Budget: \$27.5M
Ten Year Budget: \$126.8M

Deferral of several major road projects to later years

- Burnhamthorpe Road West – Loyalist Drive to Ninth Line
 - (Post 10 year)
- Creditview Road Widening– Bancroft Drive to Argentia Road
 - Post 10 years
 - bridge (2009), resurfacing (2010)
- McLaughlin Road – Bristol Road to Britannia Road
 - 2009 EA (08 funding)
 - 2011 Construction

2009 Major Roads Highlights

- Torbram Road grade separations
 - \$19M approved
 - \$11M in unit price increase
- Goreway Drive grade separation
 - \$425K detailed design
- Burnhamthorpe Road East– Arista Way to Dixie Road
 - \$6M funding over 2 years

2009 Major Roads Highlights

- Phase 2 - Hurontario Street / Highway 401 interchange
 - \$8.8M in 2009
 - Total Cost \$13M from 2008-2011
- Hurontario Street – Park Street to Lakeshore Road
 - \$1.6M in 2009

City Centre Projects

- **Living Arts Drive**
 - 2009 design and construction (existing funding)
- **Duke of York Boulevard**
 - 2009 resurfacing
- **City Centre Drive**
 - 2010 proposed resurfacing (Coordinate timing with Civic Square project)
- **Burnhamthorpe Road – Mavis Road to Hurontario Street**
 - EA 2009 – rehabilitation and streetscape/median urbanization 2011-2012 (\$6M total)
- **Princess Royal Drive – mid-block crossing**

Road Rehabilitation

2009 Budget: \$21.8M

Ten Year Budget: \$229.9M

2009 Program

- \$2.4M transferred from Road Rehabilitation program to Burnhamthorpe resurfacing
- Streets delayed to match Peel's water/sewer programs
- 30 residential streets(25%), 14 major and industrial roads (75%)
- Pavement management system upgrade(\$600K)

Road Rehabilitation

- Program funding capped at \$23.5 million/year
- Cost increases will erode effective program funding
- No “*ditch to curb and gutter*” road reconstruction program in 10 year Capital Budget
 - Proposed new environmentally-friendly ditching program to mitigate water/maintenance concerns

2009 Storm Drainage & Watercourses

2009 Budget: \$5.6M
Ten Year Budget: \$77M

- A variety of storm water management and erosion control projects

2009 Work Plan Initiatives

- Credit River Water Management Strategy Update
- Sheridan and Cooksville Creek watershed studies
- Mississauga Stormwater Quality Control Strategy update
- Environmental Advisory Committee directives

Storm Drainage and Watercourses

2010-2018 Forecast

- Lower risk projects delayed in program or bumped from forecast to meet funding constraints
- Several projects advanced or delayed to match funding envelopes to previous 2009-2017 Forecast

Bridges/Culverts

2009 Budget: \$5.05M
Ten year Budget: \$22.1M

2009 Work Plan

- The Collegeway, West of Mississauga Road \$1.2M
- Mavis Road over Fletcher's Creek \$963K
- 3 Structures for minor repairs \$780K
- Cooksville GO pedestrian overpass \$1.8M

Ten Year Program

- Funding front-ended to accommodate above projects

Noise Barriers

2009 Budget: \$1.72M
Ten Year Budget: \$6.8M

- 5 replacement locations identified in 2009 program
- Funding doesn't match overall long term needs

Other Engineering

Status quo for:

- Traffic signals
- New sidewalks
- Vehicle and equipment replacement

Other projects

- Southeast Works Yard \$6M
- Roadway property acquisition \$7M

Unfunded 2009 Projects Proposed Under City Centre Investment Reserve Fund

- Burnhamthorpe Road East streetscaping \$1.9M
- City Centre sidewalks \$750K
- Subject to business case analysis
 - Modifying Civic Centre Precinct parking \$1M
 - Design for municipal parking garage \$1M

10 Year Unfunded Needs Summary

- Road Rehabilitation
 - \$45M plus impact of inflation
- Storm Drainage
 - \$4.4M various projects
 - New environmental standards
- Municipal Parking Improvements

10 Year Unfunded Needs Summary

- Bridge and culvert structures
 - additional funding in latter years – Bridges Study
- On-street cycling facilities
- Noise barrier program
- Additional storm water quality control projects

