

# PUBLIC WORKS

*General Issues Committee*

*February 6, 2015*

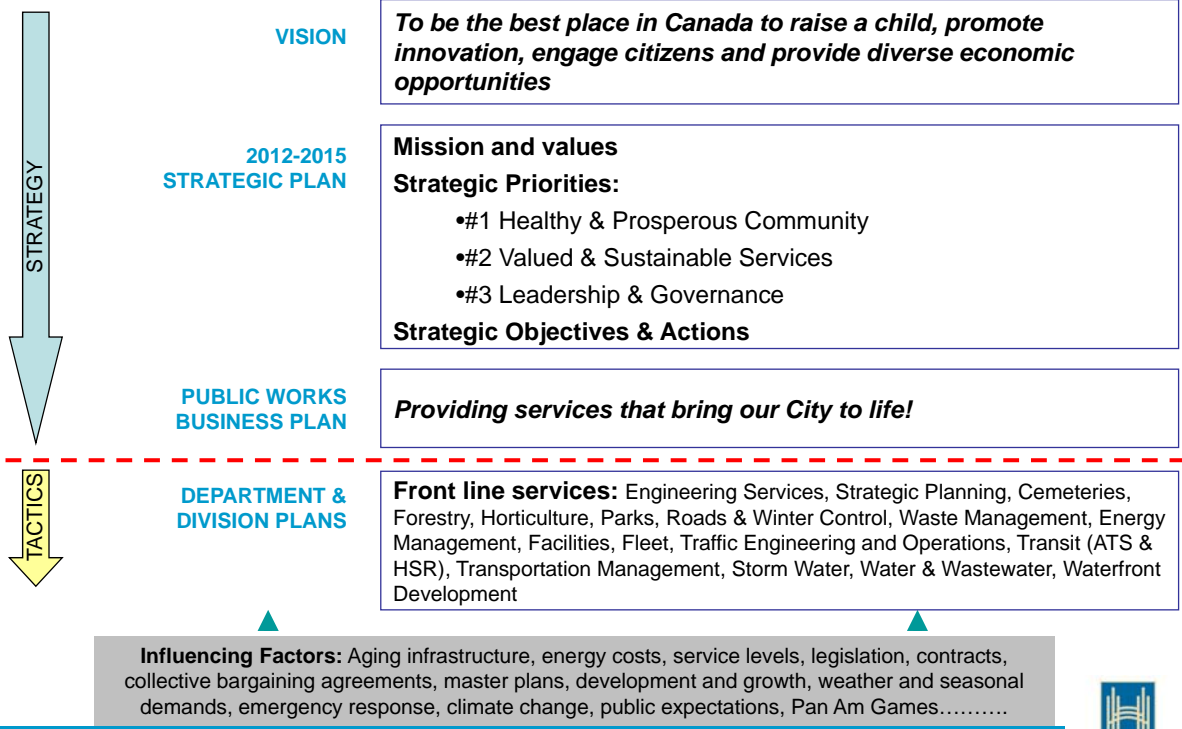
## AGENDA

1. Department Overview
2. Transit (10 Year Plan)
3. Divisional Budget Presentations
  - Transit
  - Operations
  - Environmental Services
  - Corporate Assets & Strategic Planning
  - Engineering Services

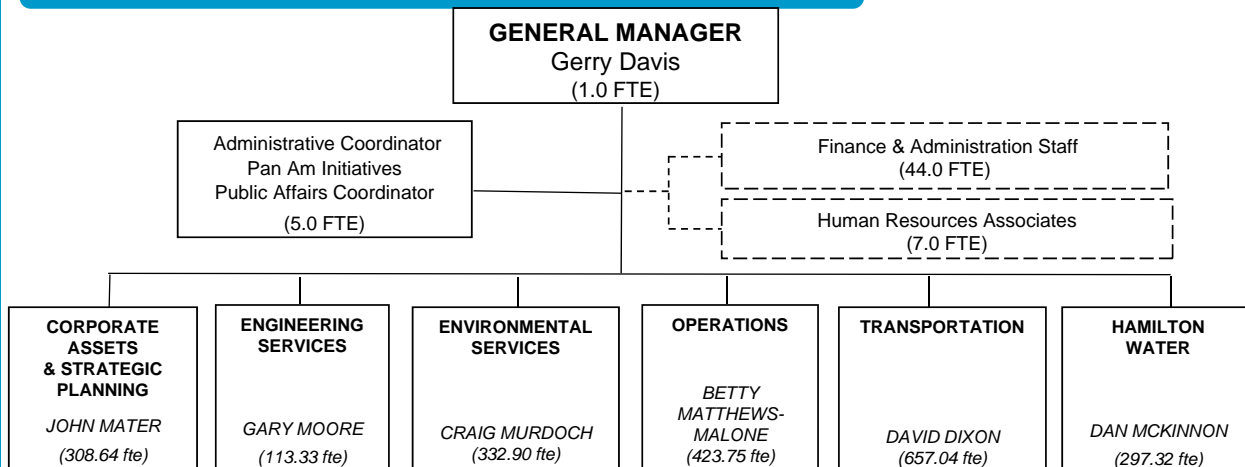
CONTEXT



CONTEXT



OVERVIEW



Complement (FTE)	Management	Other	Total	Staff to Mgt Ratio
2014	37	1,852.66	1,889.66	50.07:1
2015	37	1,855.66	1,892.66	50.15:1
Change		3.0*	3.0	
2015 (inclusive of Hamilton Water)	50	2,139.98	2,189.98	42.80:1

\*McMaster realignment (2014 in year approval for transit)



2015 CHALLENGES

- Waterfront Development
- Transit 10 Year Service Plan
- Pan Am Games
- Recreation and Corporate Facilities
- Strategic Road Safety Program
- Operating Impacts from Growth
- Commodity Markets Volatility
- Blue Box Markets and Impact on Revenues
- Sustainable Program Funding
- Effectively programming and delivering area rating based projects



**2015 CHALLENGES** - continued

FCS15010 Book 2, Page 118

- Developing new business model for golf operations to sustain the infrastructure
- Emerald Ash Borer Program
- Operating Fleet & Equipment Replacement Sustainability
- Staff Succession through elevated retirements and attrition
- Optimizing Program Performance and Accountability
- Composting Regulations
- Deteriorating Infrastructure
- Cost of Living and external contract escalation increases



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**2014 HIGHLIGHTS**

## A Prosperous and Healthy Community

- Cycling initiatives including bike share with 105 stations, 35kms of cycling lane expansion and Cannon Street bi-directional cycle track
- Processed 46,000 tonnes of recyclable materials, 54,900 tonnes of organics and collected 179,000 tonnes of waste
- Planted 7,974 trees across the City
- Waterfront Developments including tenders for Pier 7 Shoreline & Transient docks and repairs to Pier 4 washout areas, concept plans for the future of Pier 8 Park and Pier 7 Shoreline and Breakwater
- Partnered with Region of Peel for the conversion of cooking oil to biodiesel
- 17,142 volunteers contributed 34,000 hours at a value of approx. \$1m in the “Team Up to Clean Up” programs
- Preparation and planning for 2015 Pan Am Games
- 48% reduction in Park illegal dumping due to additional waste collection services at the curbside and increased & visible illegal dumping enforcement by Municipal Law Enforcement



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**2014 HIGHLIGHTS**

## Valued & Sustainable Services

- 50 construction projects worth \$115 million
- 2,500 (\$5m) road cuts; 200 lane kms of completed roads; replacement of 57.8 kms of existing sidewalks; 2.4 kms of new sidewalks constructed
- Ice storm response and clean-up; Forestry received 22,000 unique storm related calls (vs. previous average 1,200)
- Initiated Bridge Heritage Master Plan Study
- Won SWANA Silver Excellence Award for recycling and Bronze Excellence Award for public education in grey cart pilot project
- Managed Unplanned Infrastructure failures (e.g. Sydenham Escarpment, Kenilworth Escarpment and Marston Street Bridge Failures)
- Transit Real time data available – platform departure displays, trip planner, bus check, open data
- Winter Challenges

**2014 HIGHLIGHTS**

## Leadership & Governance

- Continued improvement of Corporate Culture quantified through use of the Denison Culture Assessments completed within several divisions of Public Works
- Continued Cutting Edge of Leadership training for all Public Works supervisory staff
- Performance, Accountability and Development tool started for management team
- Updated Service Profiles
- Supervisor Boot Camp



**2015 INITIATIVES**

## A Prosperous and Healthy Community

- Clean and Safe Railway Neighbourhood Projects – collaboration with MLE and CP Rail
- Glanbrook Landfill pump station infrastructure upgrades & training
- Complete implementation and commissioning of Traffic Management Centre
- Participating in the development of the Clappison Grindstone Heritage Lands Management Plan in the Cootes to Escarpment EcoPark System
- Emerald Ash Borer (EAB) Management Plan – Continue Implementation of Council approved plan
- Waterfront Development – construction of Pier 7 shoreline & transient docks

**2015 INITIATIVES**

## Valued & Sustainable Services

- Road Patrol Automated Route Completion Recording to ensure MMS Compliance
- Complete the implementation and supporting multi-residential and commercial properties with our waste diversion programs
- Revise the green fleet plan to set reduction targets for Green House Gases and Particulate emissions in accordance with the Energy Policy
- Participate in the revenue generating advertising program on the Lincoln M. Alexander Parkway
- Implement recommendations from the Cemeteries Business Plan Strategy and Land Needs Assessment



## 2015 INITIATIVES

## Leadership &amp; Governance

- Staff succession planning
- Follow-up to the Denison Culture Assessments
- Implement Performance Accountability and Development tool



## SERVICE DELIVERY PROFILES

FCS15010 Book 2, Page 116

- Public Works supports the following programs and related services:

**Environmental Management**

- Cemeteries
- Forestry
- Horticultural Programs
- Solid Waste Management
- Water Supply & Distribution  
(Rate Budget)
- Wastewater Collection & Treatment  
(Rate Budget)
- Storm Water Management

**Leisure & Recreation**

- Parks & Open Space Access
- Pan Am Games

**Transportation**

- Strategic Transportation Planning
- Roadway Access
- Traffic Flow & Roadway Safety
- Public Transportation

**Corporate Services**

- Energy Management
- Facilities Management
- Engineering Services
- Fleet Management
- Recreation Asset Management
- Public Works Departmental  
Support Services



# 2015 Preliminary Tax Operating Budget

Public Works Department

2015 Draft Budget

2015 GROSS EXPENDITURES – Tax Levy

	2014 Restated	2015 Base Budget <sup>1</sup>	\$ Change	% Change
Employee Related Cost	\$158,993,550	\$163,064,870	\$4,071,320	2.6%
Material and Supply	23,174,780	25,740,790	2,566,010	11.1%
Vehicle Expenses	33,952,080	33,486,530	(465,550)	(1.4%)
Building and Ground	13,250,080	14,603,830	1,353,750	10.2%
Consulting	258,640	295,730	37,090	14.3%
Contractual	75,231,350	79,578,950	4,347,600	5.8%
Agencies/Support Payments	183,630	183,650	20	0.0%
Reserves/Recoveries	2,527,620	2,505,620	(22,000)	(0.9%)
Cost Allocations	536,890	768,950	232,060	43.2%
Financial	3,342,400	3,500,430	158,030	4.7%
Capital Financing (E)	55,950	55,950	0	0.0%
Capital Expenditures	0	0	0	0.0%
<b>TOTAL EXPENDITURES</b>	<b>\$311,506,970</b>	<b>\$323,785,290</b>	<b>\$12,278,320</b>	<b>3.9%</b>

<sup>1</sup> inclusive of fuel savings of \$1,480,000



**EXTRAORDINARY BUDGET CHANGES- Tax Expenditures**

<b>Description</b>	<b>Amount</b> ((\$000's))
Winter Season	1,897
Transit - DARTS Contract	760
Annualized Impact of 2014 approved Transit enhancement (PW14015)	747
Operations Contracts	
- Waste Collection	930
- Waste Disposal	360
- Storm water maintenance	1,070
Transit Fleet Reserve Phase in Strategy (Year 5 of 8)	513
Streetlighting Program	1,294
Municipal Law Enforcement Illegal Dumping Project	200
Transit – McMaster Re-alignment	484
Building Repairs	1,175
Recoveries for Building Repairs	(960)

**2015 GROSS REVENUES – Tax Levy**

	<b>2014 Restated</b>	<b>2015 Base Budget <sup>1</sup></b>	<b>\$ Change</b>	<b>% Change</b>
Fees and General	(\$70,861,200)	(\$70,510,150)	\$351,050	(0.5%)
Grants and Subsidies	(14,190,500)	(13,581,190)	609,310	(4.3%)
Reserves	(1,911,670)	(2,535,940)	(624,270)	32.7%
Recoveries from Capital	(23,391,300)	(24,060,760)	(669,460)	2.9%
<b>TOTAL REVENUES</b>	<b>(\$110,354,670)</b>	<b>(\$110,688,040)</b>	<b>(\$333,370)</b>	<b>0.3%</b>

<sup>1</sup> inclusive of additional Transit revenues from growth of \$330,000



## EXTRAORDINARY BUDGET CHANGES- Tax Revenues

Description	Amount (\$000's)
Decreased Court House Lease Revenues	1,535
Decreased Recycling Revenues	386
Decreased Transfer Station /Community Recycle Centre Revenues	174
Hamilton Renewable Power Inc. – final year of dividend reduction phase in	100
Tim Hortons Field	(839)
Increased Transit Revenues from ridership growth	(580)



## 2015 GROSS – NET DEPARTMENTAL BUDGET

	2014 Restated Budget	2014 Projected Actual	2015 Preliminary Budget	2015 Preliminary vs. 2014 Restated	
				\$	%
<i>EMPLOYEE REATED COSTS</i>	158,993,550	159,623,460	163,064,870	4,071,310	2.6%
<i>MATERIAL AND SUPPLY</i>	23,174,780	26,700,990	25,740,790	2,566,010	11.1%
<i>VEHICLE EXPENSES</i>	33,952,080	33,956,110	33,486,530	(465,550)	(1.4)%
<i>BUILDING AND GROUND</i>	13,250,080	13,492,130	14,603,830	1,353,750	10.2%
<i>CONSULTING</i>	258,640	307,400	295,730	37,090	14.3%
<i>CONTRACTUAL</i>	75,231,350	80,972,890	79,578,950	4,347,600	5.8%
<i>AGENCIES and SUPPORT PAYMENTS</i>	183,630	183,630	183,650	20	0.0%
<i>RESERVES / RECOVERIES</i>	2,527,620	1,381,520	2,505,620	(22,000)	(0.9)%
<i>COST ALLOCATIONS</i>	536,890	279,360	768,950	232,060	43.2%
<i>FINANCIAL</i>	3,342,400	2,942,560	3,500,430	158,030	4.7%
<i>CAPITAL FINANCING</i>	55,950	55,950	55,950	0	0.0%
<b>TOTAL EXPENDITURES</b>	<b>311,506,970</b>	<b>319,896,000</b>	<b>323,785,290</b>	<b>12,278,320</b>	<b>3.9%</b>
<i>FEES AND GENERAL</i>	(70,861,200)	(69,184,660)	(70,510,150)	351,050	0.5%
<i>GRANTS AND SUBSIDIES</i>	(14,190,500)	(13,492,150)	(13,581,190)	609,310	4.3%
<i>RESERVES</i>	(1,911,670)	(1,514,180)	(2,535,940)	(624,270)	(32.7)%
<i>RECOVERIES FROM CAPITAL</i>	(23,391,300)	(22,780,200)	(24,060,760)	(669,460)	(2.9)%
<b>TOTAL REVENUES</b>	<b>(110,354,670)</b>	<b>(106,971,190)</b>	<b>(110,688,050)</b>	<b>(333,380)</b>	<b>0.0%</b>
<b>NET LEVY</b>	<b>201,152,300</b>	<b>212,924,810</b>	<b>213,097,250</b>	<b>11,944,940</b>	<b>5.9%</b>

Revised from Budget Book – includes \$1.48m reduction in fuel and \$330K increase in transit growth revenues



## 2015 NET OPERATING BUDGET BY DIVISION

FCS15010 Book 2, Page 120

	2014 Restated Budget	2014 Projected Actual	2015 Preliminary Budget	2015 Preliminary vs. 2014 Restated	
				\$	%
PW-General Administration	184,380	0	184,380	0	0.0%
Corporate Assets & Strategic Planning	15,548,070	15,804,590	17,962,130	2,414,060	15.5%
Engineering Services	5,996,810	5,996,810	7,290,410	1,293,600	21.6%
Environmental Services	32,203,790	32,511,640	32,593,270	389,480	1.2%
Operations	92,863,410	104,286,860	98,730,130	5,866,720	6.3%
Transit	54,355,840	54,324,920	56,336,930	1,981,090	3.6%
<b>NET LEVY</b>	<b>201,152,300</b>	<b>212,924,810</b>	<b>213,097,250</b>	<b>11,944,940</b>	<b>5.9%</b>

Includes adjustments for fuel (\$1.48m) and transit growth revenues (\$330K)



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## 2015 GROSS - NET OPERATING BUDGET

	2014 Restated	2015 Base Budget <sup>1</sup>	\$ Change	% Change
Gross Expenditures	\$311,506,970	\$323,785,290	\$12,278,320	3.9%
Gross Revenues	(\$110,354,670)	(\$110,688,040)	(\$333,370)	(0.3%)
<b>NET LEVY</b>	<b>\$201,152,300</b>	<b>\$213,097,250</b>	<b>\$11,944,950</b>	<b>5.9%</b>

<sup>1</sup> Inclusive of base budget savings

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## ASSET BASE GROWTH

Asset Type	ASSET INVENTORY			Change in Inventory from	
	2012 Inventory	2013 Inventory	2014 Inventory	2013-2014	
Roads (In km)	6,376	6,388	6,399	11	0.17%
Sidewalks (km)	2,362	2,378	2,382	4	0.17%
Bridges (#)	386	391	392	1	0.26%
Water Mains (km)	2,024	2,024	2,026	2	0.10%
Sewer Mains (km)	2,813	2,867	2,910	43	1.53%
Traffic Signals (#)	546	555	566	11	2.01%
Streetlights (#)	45,653	45,750	45,750	0	0.00%
Storm Ponds (#)	156	162	169	7	4.49%
Facilities (Corporate) (sqf)	7,250,000	7,250,000	7,500,000	250,000	3.45%
Parks (#)	397	402	410	8	2.02%
Parks (hectares maintained)	1,671	1,675	1,723	48	2.87%
Fleet Vehicles (#)	1,372	1,362	1,391	29	2.11%
Transit Vehicles (HSR & ATS) (#)	289	296	294	-2	-0.69%
Waste Management Facilities (#)	8	8	8	0	0.00%
Catch Basins (#)	39,009	42,891	42,891	0	0.00%
Trees (Urban ROW) (#)	144,791	150,305	155,479	5,174	3.57%
Trees (Rural ROW) (#)	107,000	107,000	107,000	0	0.00%
Cemeteries (sites)	67	67	67	0	0.00%
Bike Lanes (km)	141	153	168	15	10.64%
Trails (km)	54	56	64	8	14.81%
Floral Traffic Islands (#)	272	279	282	3	1.10%
Medians/Blvds/Laybys		87	89	2	2.30%
Traffic Roundabouts / Circles (#)	61	61	61	0	0.00%
Households	215,730	218,500	220,685	2,185	1.00%

- 2013 HOUSEHOLDS FROM 2013 FINANCIAL REPORT (ROUNDED), INCREASE FOR 2014 BASED ON GROWTH FORECAST



## 2015 TAX OPERATING BUDGET

**Initial fuel guideline based on market in the fall of 2014**

**Diesel \$1.16**

**Unleaded \$1.10**

**Revised Fuel Price guideline based on updated market conditions**

**Diesel – 0.99 cents**

**Unleaded – 0.99 cents**

**The 2014 budget was based on diesel and unleaded at \$1.10**



# Transit 10 Year Plan



Hamilton  
Public Works

**Public Works  
Transit Division**

## **Ten Year Local Transit Strategy**

February 6, 2015

*Providing services that bring our City to life !*

# TEN YEAR LOCAL TRANSIT STRATEGY

## Presentation Outline

- Overview
- Strategic Context
- Municipal Investment & Benchmarking
- Customer Experience
- Current System Deficiencies
- Application of Service Standards
- Network & Ridership Growth
- Rapid Transit Corridors
- Fares
- Financial Summary
- Recommendations



- Community
- People
- Processes
- Finance



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## OVERVIEW

### Council Direction

- February 25, 2013 - Council approved Rapid Ready Expanding Mobility Choices in Hamilton.
- June 26, 2013 - Council provides staff with further direction:
  1. Come forward with recommendations for consideration during the 2014 operating and capital budget process with the first priorities for local transit service improvements to begin implementing Rapid Ready;
  2. Report back in time for the 2015 budget process to the new City Council on a **ten-year Hamilton local transit service level strategy**, including specific route recommendations and a financial strategy, with reference to the role played by rapid transit, and with a goal of reaching 80-100 rides per capita by 2025.

- Community
- People
- Processes
- Finance



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# OVERVIEW

## Conceptual Framework

Building on the existing effective and efficient service ...

Continue to refine the customer experience

Address current system deficiencies

Revise & apply Service Standards

Continue to add capacity until ridership exceeds system capacity

Rapid transit corridors needed

... Requires government & customer investment.



- Community
- People
- Processes
- Finance



# OVERVIEW

## Proposed Rapid Transit Corridors



**B L A S T**  
 Future Expansion

Hamilton Long Term Rapid Transit System "B.L.A.S.T" (Conceptual Only)

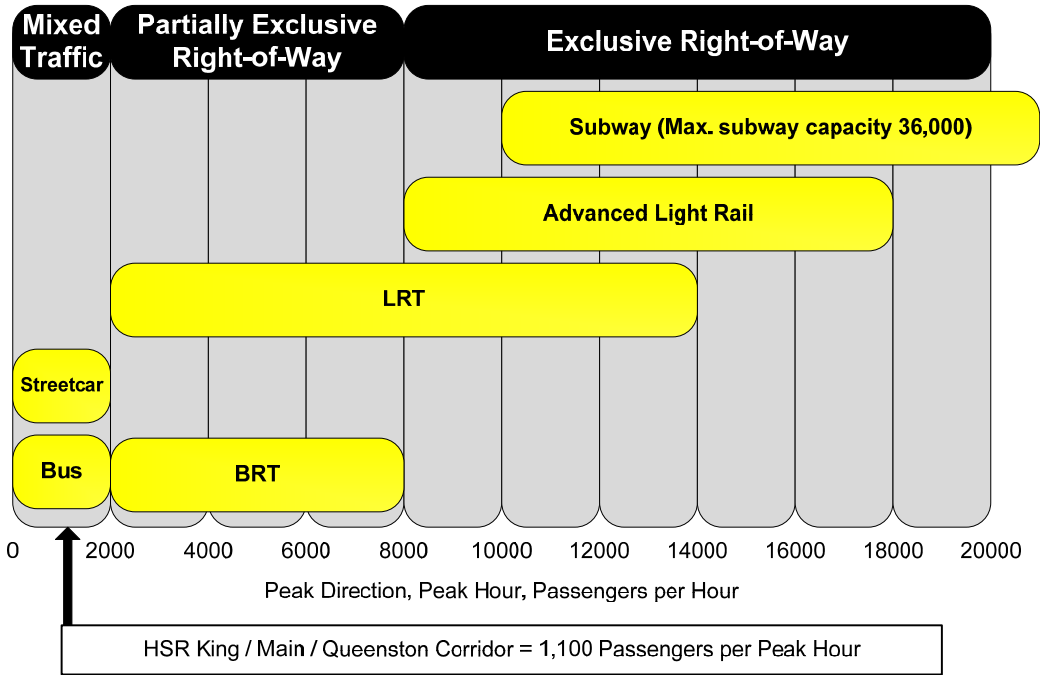


- Community
- People
- Processes
- Finance



# OVERVIEW

## Transit Technologies & Capacities



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# OVERVIEW

## Service, Operating & Capital

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	10 Year Total
	Deficiencies		Standards								
Growth											10 Year Total
Modal Split											
<b>SERVICE</b>											
Hours (000's)	814	16	34	34	39			299			422
Annual Operating (000's)	\$88,000	\$2,000	\$4,000	\$4,000	\$4,500			\$36,500			\$51,000
Full Time Equivalents	644	16	34	26	30			230			336
Fleet	221	8	17	5	11			85			126
Fares	\$2.00	\$0.25	\$0.10	\$0.10	\$0.10			TBD			
<b>OPERATING</b>											
Service Expenditures (000's)		\$800	\$3,500	\$4,800	\$4,500						
Fare Revenues (000's)		-\$1,910	-\$3,770	-\$3,120	-\$3,230						
Levy (000's)		-\$1,110	-\$270	\$1,680	\$1,270						
Annual Change to Levy		-0.14%	-0.03%	0.21%	0.15%						
<b>FUNDED CAPITAL (000's)</b>											
Fleet (Local)		\$8,700		\$2,650	\$2,030			\$16,710			\$30,090
<b>UNFUNDED CAPITAL (000's)</b>											
Fleet (BLAST)		\$6,875		\$5,300	\$5,420			\$39,280			\$56,875
Maintenance Storage Facility		\$5,000	\$10,000	\$25,000	\$80,000			\$80,000			\$200,000
Customer Experience		\$4,000	\$4,000	\$4,000	\$4,000			\$23,000			\$39,000
Corridor Capacity		\$200	\$200	\$200	\$200			\$5,200			\$6,000
<b>Total</b>		\$16,075	\$14,200	\$34,500	\$89,620			\$147,480			\$301,875

- 50% increase in service

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# TEN YEAR LOCAL TRANSIT STRATEGY

## Strategic Context



- Community
- People
- Processes
- Finance



- Growth Forecasts
- Changing Role of Public Transportation
- Benefits of Public Transportation
- Corporate Strategy & Policy
- Transportation & Growth
- Transportation Master Plan
- Rapid Ready Expanding Mobility Choices

# STRATEGIC CONTEXT

## Growth Forecasts

- Community
- People
- Processes
- Finance



Hamilton	2011 (Census)	2031*	2036*	2041*
Population (Persons)	519,950	660,000	730,000	780,000
Percentage Average Annual Change		1.3%	2.1%	1.4%
Employment (Jobs)	192,850**	300,000	330,000	350,000
Percentage Average Annual Change		2.8%	2.0%	1.2%

Source:

\*Amendment No. 2 to the Growth Plan for the Greater Golden Horseshoe - City of Hamilton Comments

\*\* 2011 National Household Survey

- Community
- People
- Processes
- Finance



## STRATEGIC CONTEXT

### Changing Role of Public Transportation



**Public Transportation as an investment in a Vibrant and Sustainable City**

***A Prosperous & Healthy Community***  
*Transportation as an enabler for the community we strive to create, a healthy economy and a good quality of life .*



- Community
- People
- Processes
- Finance



## STRATEGIC CONTEXT

### Benefits of Public Transportation

- Reduced household transportation costs.
- Reduced congestion and delays (escarpment crossings at capacity by 2031).
- Addresses changing demographics (aging population).
- Positive health, environment and community impacts.
- Promotes economic development (attracting employers, creative industries).
- Promotes social equity.



## STRATEGIC CONTEXT

### Corporate Strategy and Policy

- Community
- People
- Processes
- Finance



- 2012- 2015 Strategic Objective 1.4 “Improve the City’s transportation system to support multi-modal mobility and encourage inter-regional connections”.
- GRIDS (Growth Related Integrated Development Strategy) & Official Plan.
- 2007 Transportation Master Plan objectives and modal split targets (annual rides per capita 80-100).

#### Vision

To be the best place in Canada to raise a child, promote innovation, engage citizens and provide diverse economic opportunities.

#### Mission

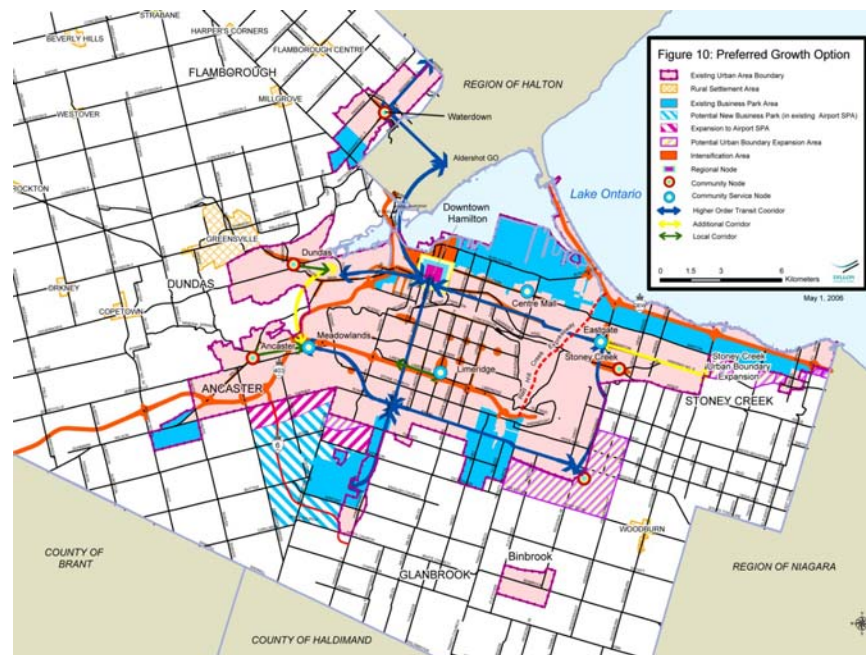
We provide quality public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

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## STRATEGIC CONTEXT

### Transportation & Growth

- Community
- People
- Processes
- Finance



- **The desired form of urban growth & transit are interdependent.**

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- Community
- People
- Processes
- Finance



## STRATEGIC CONTEXT

### Transportation Master Plan

- Emphasis on significantly improving transit services in combination with road capacity optimization before road expansion

	2001	Near-Term Target (2011)	Current Status (2011 TTS)	Long-Term Target (2021-2031)
Estimated daily vehicle kilometres of Travel	4.8 Million KM	4.3 Million KM	n/a*	3.8 Million KM
Share of daily trips made by single-occupant drivers	68%	58%	67%	52%
Share of daily trips made by using municipal transit	5%	9%	7%	12%
Share of daily trips made by using walking or cycling	6%	10%	6%	15%
Annual transit rides per capita	48.5**	60	45.1**	80-100

\*The 2011 TTS has released limited data to give a current status update.

\*\*Canadian Urban Transit Assoc. statistic based on service area population.

- **City is lagging behind in all targets.**

- Community
- People
- Processes
- Finance



## STRATEGIC CONTEXT

### Rapid Ready Expanding Mobility Choices

- Multi-modal approach, including seamless integration with GO transit.
- 5 Year framework to continue advancing public transit towards rapid transit.
- Rapid Ready financial requirements:
  - Overall Capital needs of \$156M.
  - Short term Operating needs of \$45M.



# TEN YEAR LOCAL TRANSIT STRATEGY

## Municipal Investment & Benchmarking



- Community
- People
- Processes
- Finance



- Trips per Capita
- Contribution per Capita
- Transit Benchmarking
- Synopsis

## MUNICIPAL INVESTMENT & BENCHMARKING

### Trips per Capita (2013)

Municipality	Trips per Capita		% Change
	2006	2013	
Brampton	24.48	35.43	44.73%
Durham	13.83	19.46	40.71%
London	54.12	63.07	16.54%
York Region	18.00	21.51	19.50%
Mississauga	41.22	47.59	15.45%
Windsor	28.39	30.53	7.54%
<b>Hamilton</b>	<b>47.99</b>	<b>45.13</b>	<b>-5.96%</b>

- Community
- People
- Processes
- Finance



- City is trending in the wrong direction.
- 2013 Rapid Ready adoption.

## MUNICIPAL INVESTMENT & BENCHMARKING Contribution per Capita (2013)

Municipality	Municipal Contribution per Capita		% Change	Average Increase per Year
	2006	2013		
Brampton	47.73	84.20	76.41%	10.92%
Durham	39.15	76.28	94.84%	13.55%
Mississauga	53.06	87.59	65.08%	9.30%
York Region	63.78	87.69	37.49%	5.36%
London	44.63	58.50	31.08%	4.44%
Windsor	48.02	60.71	26.43%	3.78%
<b>Hamilton</b>	<b>58.50</b>	<b>65.89</b>	<b>12.63%</b>	<b>1.80%</b>

- City has lowest contribution increase per year.
- 2013 Rapid Ready adoption.

- Community
- People
- Processes
- Finance



## MUNICIPAL INVESTMENT & BENCHMARKING Transit Benchmarking (2013)

Municipality	Average Fare	Trips per Capita	Trips per Revenue Hour	Revenue Hours per Capita	Cost per Revenue Hour	Revenue / Cost Ratio	Overall Rank
London	1	1	1	3	1	1	1
<b>Hamilton</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>2</b>
Mississauga	4	2	4	1	5	3	3
Brampton	6	4	5	2	4	4	4
Windsor	3	5	3	6	3	5	5
York Region	7	6	7	5	7	6	6
Durham	5	7	6	7	6	7	7

- Relatively efficient transit system.

- Community
- People
- Processes
- Finance



# MUNICIPAL INVESTMENT & BENCHMARKING

## Synopsis

- Community
- People
- Processes
- Finance



- HSR relatively efficiently run public transit system.
- Hamilton's investment in transit service has been low:
  - Low overall fare.
  - Lowest average municipal contribution increase per year.
- More investment in transit is required:
  - To support City goals, growth and development.
  - To ensure sustainability of system and quality of service.

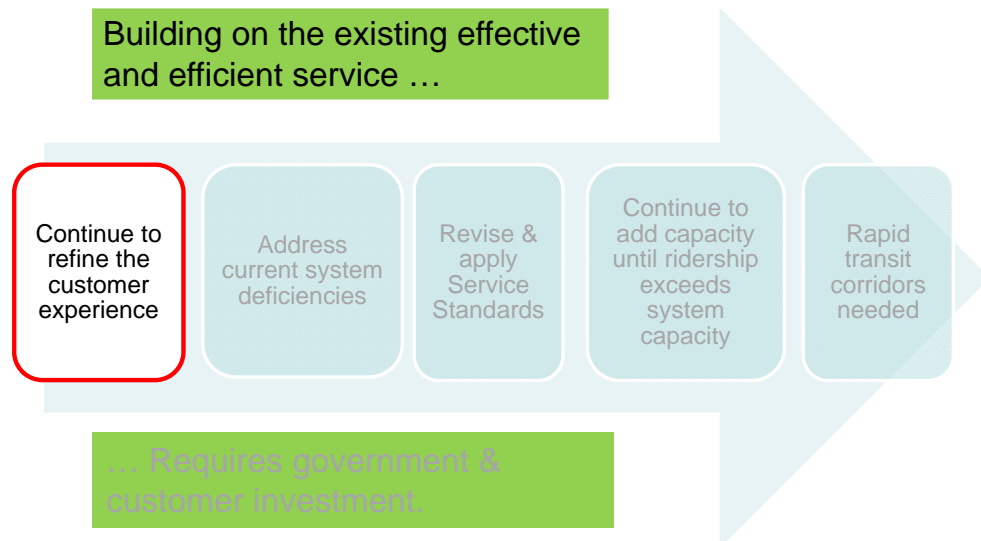


**Rapid Ready  
Expanding  
Mobility Choices  
in Hamilton**

# TEN YEAR LOCAL TRANSIT STRATEGY

## Customer Experience

- Community
- People
- Processes
- Finance



- **Proposed Improvements**

- Community
- People
- Processes
- Finance



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## CUSTOMER EXPERIENCE Proposed Improvements

### Branding and Marketing

- Branding strategy development & launch.
- Renewed marketing strategy.
- Application of brand to physical assets.

**Total Cost: \$16.5M (\$4.5M branding, \$12M for application to assets)**

### Customer Information and Amenities

- Improved customer information (real time displays, social media, etc.).
- Improved customer amenities & services (shelters, PRESTO customer service, etc.).
- Terminal development & improvements (approx. 6 locations subject to feasibility analysis).

**Total Cost: \$22.5M (\$4.5M for passenger amenities, \$18M for new/expanded terminals)**

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- Community
- People
- Processes
- Finance



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## TEN YEAR LOCAL TRANSIT STRATEGY Current System Deficiencies

Building on the existing effective and efficient service ...



... Requires government & customer investment.

- **Analysis & Constraints**
- **Preliminary Assessment**
- **Challenges**
- **Proposed Service Changes**

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# CURRENT SYSTEM DEFICIENCIES

## Analysis & Constraints

### System review to identify:

- Capacity deficiencies.
- Scheduling issues.
- Underperforming routes.
- Opportunities to simultaneously address deficiencies while developing BLAST network.

### Data limitations:

- Good schedule adherence data.
- Good bypass data.
- Limited passenger count information.

- Community
- People
- Processes
- Finance



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# CURRENT SYSTEM DEFICIENCIES

## Preliminary Assessment

Group	BLAST Routes	Related Local Routes	Regional Connections	Trip Generators
1	B-Line	01 King 05 Delaware 51 University	GO Hunter, GO Centennial, A-Line, L-Line, T-Line, S-Line	<b>King/Main/Queenston Corridor,</b> Eastgate Square, Stadium, University Plaza, McMaster Health Sciences, Downtown, McMaster University
2		02 Barton	GO Hunter, GO James N, GO Centennial, A-Line, B-Line, L-Line, T-Line	The Centre on Barton, Downtown, Stadium, General Hospital
3	A-Line	21 Upper Kenilworth 27 Upper James 33 Sanatorium 35 College 51 University	GO Hunter, GO James N, B-Line, L-Line, T-Line, S-Line	<b>James/Upper James Corridor,</b> Waterfront, Downtown, St. Joseph's Hospital, Mohawk College, Airport, 4 Pad Arena, St. Joseph's Healthcare West 5th Campus, <u>Heritage Greene Shopping Complex</u>
4		25 Upper Wentworth 26 Upper Wellington	GO Hunter, B-Line, L-Line, T-Line, S- Line	Downtown, St. Joseph's Hospital, Lime Ridge Mall
5	T-Line	41 Mohawk	A-Line, B-Line	<b>Mohawk Corridor,</b> Industrial Area, The Centre on Barton, Lime Ridge Mall, Meadowlands
6		03 Cannon 04 Bayfront	GO Hunter, GO James N, A-Line, L-Line, T-Line, S-Line	Industrial Area, Stadium, Downtown
7		22 Upper Ottawa 23 Upper Gage	GO Hunter, B-Line, L-Line, T-Line, S- Line	Downtown, St. Joseph's Hospital, Juravinski Cancer Centre, Red Hill Business Park

Group	Service	FTE Ops	FTE Mtc	Fleet	Operating Cost	Capital Cost
BLAST	20,000	17	3	11	\$2,400,000	\$6,875,000
Local	30,000	26	4	14	\$3,600,000	\$8,750,000
<b>TOTAL</b>	<b>50,000</b>	<b>43</b>	<b>7</b>	<b>25</b>	<b>\$6,000,000</b>	<b>\$15,625,000</b>

**Service deficiency improvements can be a combination of:**

Increased Frequency / Additional School Only Trips / Additional Running Time / Additional Layover / Route Restructuring

- Community
- People
- Processes
- Finance



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- Community
- People
- Processes
- Finance



## CURRENT SYSTEM DEFICIENCIES Challenges

### Buses

- Order backlog usually in the 1 to 2 year range; therefore, fleet availability for any peak improvements will be challenging.

### Maintenance & Storage Facility

- Mountain Transit Centre currently operating at capacity.
- Adding capacity will take 3 to 5 years.
- Manageable in the short term - long term solution required.
- Detailed costs subject to further investigations.



### Operators

- Hiring and training of Operators is a lengthy process taking up to 6 months; HSR currently has an Operator deficiency.

- Community
- People
- Processes
- Finance



## CURRENT SYSTEM DEFICIENCIES Proposed Service Changes

### Phase-in of system deficiencies (\$6M) in 2015 and 2016:

- September 2015 - \$0.8M (annualized impact of \$2M).
- March 2016 - \$1.5M (annualized impact of \$2M).
- September 2016 - \$0.8M (annualized impact of \$2M).

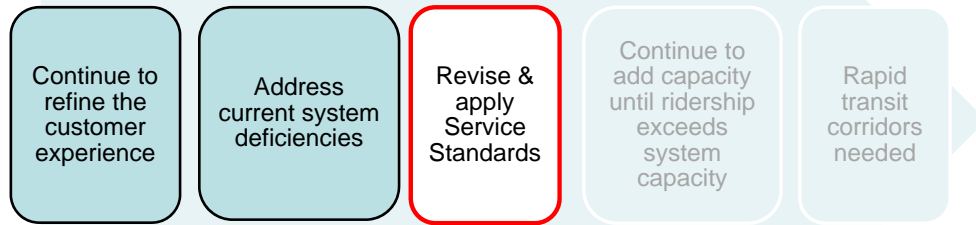
### Requires commitment in 2015 Budget for:

- 50 FTE.
- Procurement of 25 new buses for 2016 delivery.
- Delay retirement of 10 buses as interim measure.

# TEN YEAR LOCAL TRANSIT STRATEGY

## Application of Service Standards

Building on the existing effective and efficient service ...



... Requires government & customer investment.

- **Current Transit Service Guidelines**
- **Summary of Proposed Service Standards**
- **Proposed Service Standards**
- **Gap Analysis Summary**
- **Frequency Gaps**
- **Proposed Service Changes**

- Community
- People
- Processes
- Finance



## APPLICATION OF SERVICE STANDARDS

### Current Transit Service Guidelines (1996)

Service parameter	Monday to Saturday	Sunday & Holiday
Hours of operation	6:00am to 12:00am	6:00am to 6:00pm
Maximum headway	30 minutes	60 minutes
Walking distance	400 metres for 90% of the population, where permitted by the local street network.	
Revenue/cost ratio (R/C ratio)	<ul style="list-style-type: none"> <li>• Greater than 50% for entire system</li> <li>• Minimum 30% for individual routes, otherwise basic Monday to Friday rush hour only service to be provided every 30 minutes</li> </ul>	

- **Current standards are pre-amalgamation & incomplete.**
- **Updated standards will provide an objective basis to determine service levels to address gaps & grow service.**
- **A review of peers and best practices was undertaken.**

- Community
- People
- Processes
- Finance



## APPLICATION OF SERVICE STANDARDS

### Summary of Proposed Service Standards

#### Coverage and Expansion of Service:

- Maintains 90% within 400m standard.
- Clarifies weekday peak service as a minimum.
- Includes workplaces as well as residents.

Proposed HSR Service Standard			
Coverage	Weekday	Saturday	Sunday
System Wide Minimum	90% of residents / workplaces within Urban Transit Area to be within 400 metres of Weekday Peak service.		

- Community
- People
- Processes
- Finance



## APPLICATION OF SERVICE STANDARDS

### Summary of Proposed Service Standards

#### Service Span (Hours of Operation)

- States span as a maximum & lets ridership levels justify span expansion.

Proposed HSR Service Standard			
Span (Start of trip)	Weekday	Saturday	Sunday
Route Maximum	5:00 AM – 2:00 AM	5:00 AM – 2:00 AM	6:00 AM – 12:00 AM

- Community
- People
- Processes
- Finance



#### Frequency

- Includes a minimum frequency for each service type.

Proposed HSR Service Standard			
Frequency (Time between buses)	Weekday Peak / Non-Peak/ Evening	Saturday AM / Day / Evening	Sunday AM / Day / Evening
Route Minimum	30 / 30 / 60	30 / 30 / 60	30 / 30 / 60

## APPLICATION OF SERVICE STANDARDS

### Summary of Proposed Service Standards

#### Productivity

- Includes a minimum threshold based on boardings per service hour.
- Routes not meeting the minimum should be reviewed or monitored for service reductions.

Proposed HSR Service Standard			
Productivity (Boardings per Service Hour)	Weekday Peak / Non-Peak/ Evening	Saturday AM / Day / Evening	Sunday AM / Day / Evening
Route Minimum	25 / 15 / 15	15 / 15 / 15	15 / 15 / 15

- Community
- People
- Processes
- Finance



## APPLICATION OF SERVICE STANDARDS

### Summary of Proposed Service Standards

#### Loading

- Sets a maximum standard based on seated capacity.
- Routes that exceed the maximum should be reviewed for added capacity.

Proposed HSR Service Standard			
Loading (Expressed as Percentage of Seated Capacity)	Weekday Peak / Non-Peak/ Evening	Saturday AM / Day / Evening	Sunday AM / Day / Evening
Route Maximum	125 / 100 / 100	100 / 100 / 100	100 / 100 / 100

- Community
- People
- Processes
- Finance



- Community
- People
- Processes
- Finance



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## APPLICATION OF SERVICE STANDARDS

### Proposed Transit Service Standards

Proposed HSR Service Standards			
Coverage	Weekday	Saturday	Sunday
System Wide Minimum	90% of residents / workplaces within Urban Transit Area to be within 400 metres of Weekday Peak service.		
Span (Start of trip)	Weekday	Saturday	Sunday
Route Maximum	5:00 AM – 2:00 AM	5:00 AM – 2:00 AM	6:00 AM – 12:00 AM
Frequency (Time between buses)	Weekday Peak / Non-Peak/ Evening	Saturday AM / Day / Evening	Sunday AM / Day / Evening
Route Minimum	30 / 30 / 60	30 / 30 / 60	30 / 30 / 60
Productivity (Boardings per Service Hour)	Weekday Peak / Non-Peak/ Evening	Saturday AM / Day / Evening	Sunday AM / Day / Evening
Route Minimum	25 / 15 / 15	15 / 15 / 15	15 / 15 / 15
Loading (Expressed as Percentage of Seated Capacity)	Weekday Peak / Non-Peak/ Evening	Saturday AM / Day / Evening	Sunday AM / Day / Evening
Route Maximum	125 / 100 / 100	100 / 100 / 100	100 / 100 / 100

- Community
- People
- Processes
- Finance



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## APPLICATION OF SERVICE STANDARDS

### Gap Analysis Summary

**Coverage** : No deficiencies.

**Span**: No deficiencies.

**Frequency**: Several routes do not meet minimum standards.

**Productivity**: Potentially underperforming routes to be monitored.

**Loading**: Resolved in conjunction with Current System Deficiencies.

- Modest investment required to address gaps in frequency.

## APPLICATION OF SERVICE STANDARDS

### Frequency Gaps

Group	Local Route(s)	Frequency	Regional Connections	Trip Generators
1	04 Bayfront 06 Aberdeen 07 Locke 08 York 51 University	Improve Saturday and Sunday Headways to 30 (from 60) minutes	GO James St. N, GO Hunter, B-Line, A-Line, L-Line	Downtown, industrial area, waterfront, McMaster University, Innovation Park, Princess Point
2	22 Upper Ottawa 23 Upper Gage 24 Upper Sherman 27 Upper James 33 Sanatorium 34 Upper Paradise 41 Mohawk	Improve Saturday and Sunday Headways to 30 (from 60) minutes	GO Hunter, B-Line, A-Line, S-Line, T-Line	Downtown, industrial area, The Centre on Barton, Limeridge Mall, St. Joseph's Hospital, Juavinski Cancer Centre, Red Hill Business Park, Meadowlands
3	16 Ancaster 18 Waterdown 55 Stoney Creek 56 Centennial	Improve all deficient headways to minimum 30 minutes during all periods and change one-way loop in Waterdown to bidirectional.	GO Aldershot Station, Future GO Confederation Station, B-Line, L-Line, T-Line	Meadowlands, Flamborough Business Park, Stoney Creek Business Park, Confederation Park, Eastgate Square

Group	Service Hours	FTE Ops	FTE Mtce	Fleet	Operating Cost	Capital Cost
Local	16,000	9	3	1	\$1,100,000	\$660,000

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## APPLICATION OF SERVICE STANDARDS

### Proposed Service Changes

#### 2017 Proposed Service Changes:

- Approximately 12 FTE & 1 bus.
- Annualized impact of approximately \$1.1M.
- Service improvements may include a combination of methods and subject to detailed review.

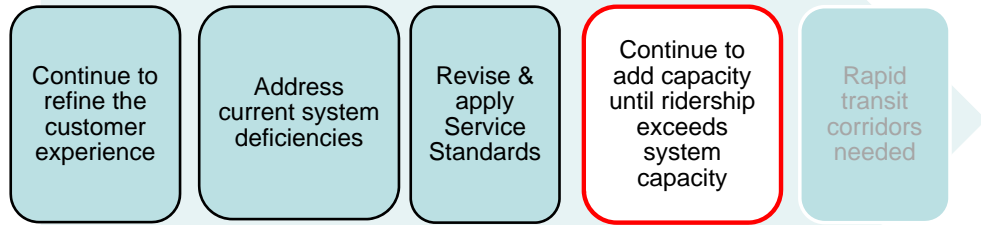
**Substantial system alignment with new service standards by 2017.**

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# TEN YEAR LOCAL TRANSIT STRATEGY

## Network & Ridership Growth

Building on the existing effective and efficient service ...



... Requires government & customer investment.

- Principles
- Annual Service Plan Development Process
- Rapid Ready – Major Transit Enhancements
- Increasing Corridor Capacity
- 2017 – 2024 Proposed Service Changes

- Community
- People
- Processes
- Finance



## NETWORK & RIDERSHIP GROWTH

### Principles

**Continual improvements that reflect emerging needs, population & employment growth:**

- Expanding service coverage in growth areas.
- Expanding service frequency & span to meet demand.
- Improving connections to outer communities.
- Improving connections with inter-regional transit (GO) & other modes.

**Developing the BLAST network to promote ridership growth:**

- Increase service levels on the A, B & T-Line corridors towards rapid transit.
- Introduce express service on the S and L lines.
- Strengthen the connectivity between the terminals/nodes (Downtown, McMaster University, Lime Ridge Mall, Eastgate Square, Mohawk College, Meadowlands, Valley Park, MTC/Airport).
- Feed the future rapid transit corridors.

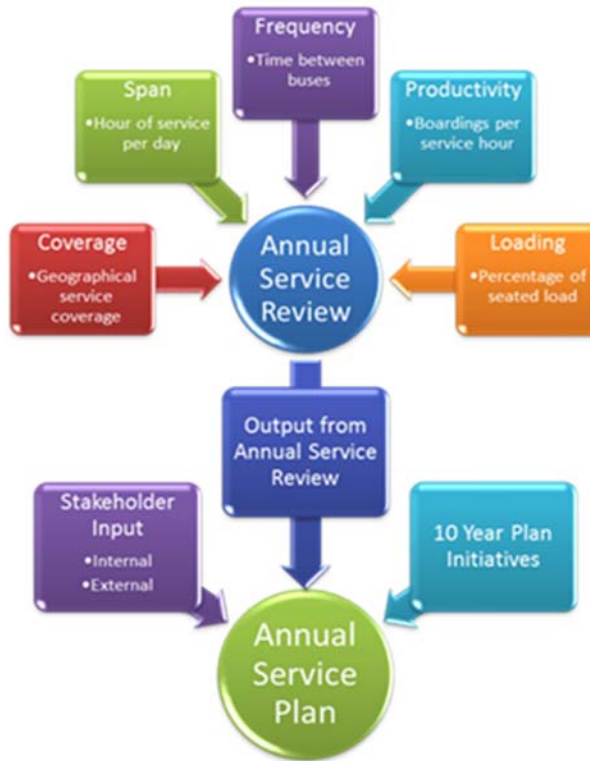
- Community
- People
- Processes
- Finance





# NETWORK & RIDERSHIP GROWTH

## Annual Service Plan Development Process



- Community
- People
- Processes
- Finance



# NETWORK & RIDERSHIP GROWTH

## Rapid Ready – Major Transit Enhancements



- Community
- People
- Processes
- Finance



**B L A S T**  
Future Expansion

Hamilton Long Term Rapid Transit System "B.L.A.S.T." (Conceptual Only)



## NETWORK & RIDERSHIP GROWTH Increasing Corridor Capacity

- Community
- People
- Processes
- Finance



- Signal priority.
- Queue jump lanes.
- Dedicated lanes.
- Large capacity buses.
- Proof of payment.
- Fare paid zones.

**Total Cost: \$6M.**

**Next Step: Higher Order Transit.**

## NETWORK & RIDERSHIP GROWTH 2017-2024 Proposed Service Changes

- Community
- People
- Processes
- Finance



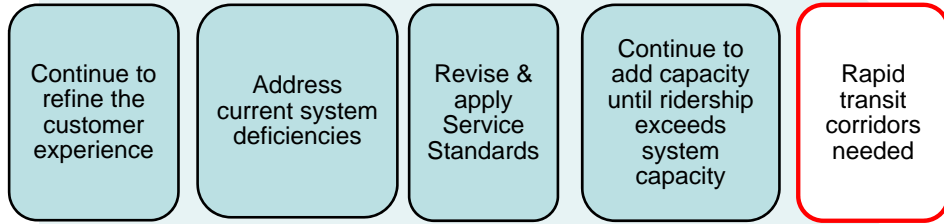
	Vehicles			Capital Cost			Approx. Annual Operating Cost
	Local	BLAST	Total	Local	BLAST	Total	
Accommodate Annual Growth @ 2%	30	10	40	\$ 21,390,000	\$ 7,190,000	\$28,580,000	\$ 2,100,000
Ridership Growth (modal shift)		60	60		\$42,810,000	\$42,810,000	\$ 3,700,000
<b>Totals</b>	<b>30</b>	<b>70</b>	<b>100</b>		<b>\$50,000,000</b>	<b>\$71,390,000</b>	<b>\$ 5,800,000</b>

- **Approximate 10 minute frequency or better on major BLAST corridors – differentiates express bus as a higher level of service.**
- **Rides per capita of approx. 50 estimated by 2024.**
- **In order to approach 80-100 rides per capita higher order transit is needed.**

# TEN YEAR LOCAL TRANSIT STRATEGY

## Rapid Transit Corridors Needed

Building on the existing effective and efficient service ...



... Requires government & customer investment.

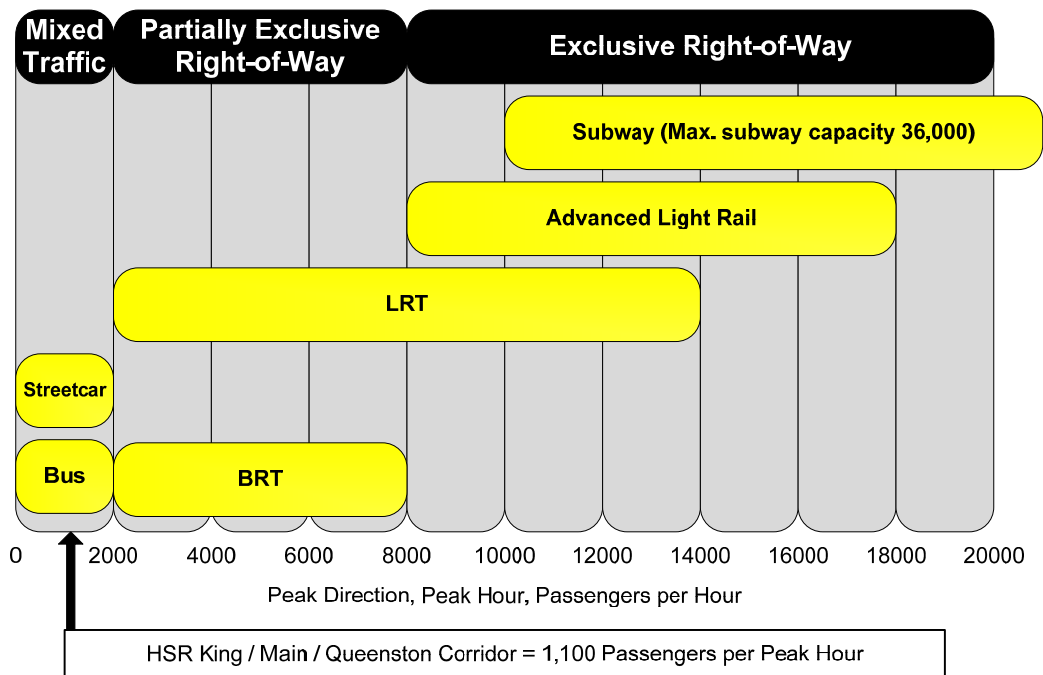
- Transit Technologies & Capacities
- Higher Order Transit

- Community
- People
- Processes
- Finance



# RAPID TRANSIT CORRIDORS NEEDED

## Transit Technologies & Capacities



- Community
- People
- Processes
- Finance



# RAPID TRANSIT CORRIDORS NEEDED Higher Order Transit

- Begin to Shift Modal Split with Enhanced Express Bus **Followed by Higher Order Transit.**

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
LOCAL SERVICE	Deficiencies		Stds														
BLAST - Express Bus	Deficiencies																
BLAST - Higher Order																	

- Begin to Shift Modal Split with **Higher Order Transit.**

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
LOCAL SERVICE	Deficiencies		Stds														
BLAST - Express Bus	Deficiencies																
BLAST - Higher Order																	

# TEN YEAR LOCAL TRANSIT STRATEGY Fare Policy



- Principles
- Elasticity
- 4 Year Revenue & Ridership Impact of Fares & Service Increases
- Historical Fare Increases
- Transit Fare Comparison
- Fare Structure Comparison
- Proposed Multi Year Fare Increases
- Annual Impact of Fares & Service Increases

- Community
- People
- Processes
- Finance



# FARE POLICY

## Principles

### Fair Share

- Customers and taxpayers (residential and non-residential) benefit from transit.
- Thus customers through fares and taxpayers through levy contributions must jointly share cost of providing transit.

### Fare Structure

- Various fare media tied to price of Single Adult Ride ticket.

### Annual Fare Increase

- Initially to help pay for service improvements and bring about alignment with comparator transits.
- Subsequently to establish regular modest fare increases to share in the cost of transit growth.

- Community
- People
- Processes
- Finance

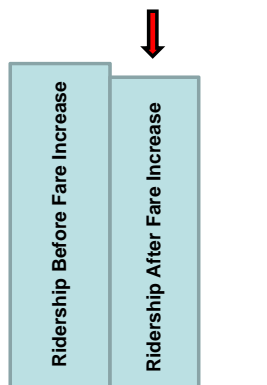


# FARE POLICY

## Elasticity

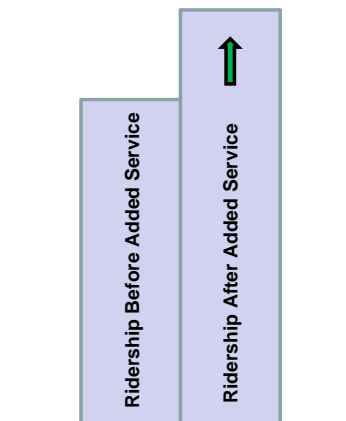
### Fare Elasticity

1% increase in fares =  
0.2% to 0.5% **decrease** in ridership



### Service Elasticity

1% increase in service =  
0.5% to 0.7% **increase** in ridership



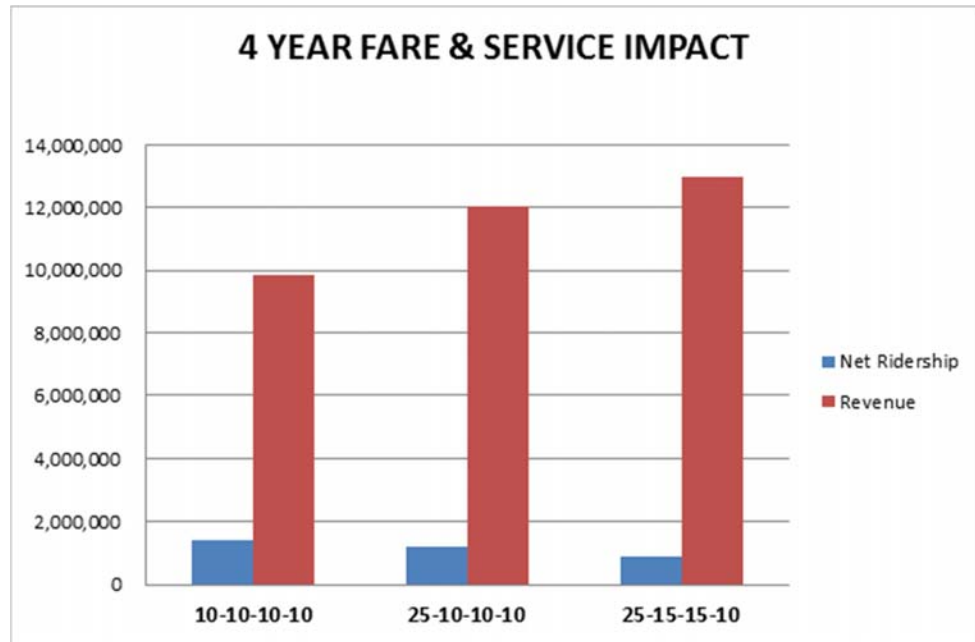
- Ridership & fare revenues are affected by the interaction of combined elasticity.
- Customers are more sensitive to service than fares.
- Therefore, service has a greater impact on ridership than fares.

- Community
- People
- Processes
- Finance



## FARE POLICY

### 4 Year Revenue & Ridership Impact of Fares & Service Increases



- Community
- People
- Processes
- Finance



## FARE POLICY

### Historical Fare Increases

	Cash	Ticket		Monthly Pass		
	Adult	Adult	Student	Adult	Student	Senior*
Jan-04	\$ 2.10	\$ 1.70	\$ 1.35	\$ 65.00	\$ 50.00	na
Jun-07	\$ 2.25	\$ 1.75	\$ 1.45	\$ 71.00	\$ 56.00	na
Jan-08	\$ 2.40	\$ 1.85	\$ 1.55	\$ 79.00	\$ 63.00	na
Jan-10	\$ 2.55	\$ 2.00	\$ 1.65	\$ 87.00	\$ 71.00	na
Jan-14	\$ 2.55	\$ 2.00	\$ 1.65	\$ 87.00	\$ 71.00	\$ 20.50

- **No fare increase since 2010.**

- Community
- People
- Processes
- Finance



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## FARE POLICY

### Transit Fare Comparison (2014)

Municipality	Cash	Ticket		Monthly Pass		
	Adult	Adult	Student	Adult	Student	Senior
London	\$ 2.75	\$ 1.90	\$ 1.54	\$ 81.00	\$ 81.00	\$ 57.50
Hamilton	\$ 2.55	\$ 2.00	\$ 1.65	\$ 87.00	\$ 71.00	\$ 20.50
Windsor	\$ 2.75	\$ 2.30	\$ 1.80	\$ 87.00	\$ 60.00	\$ 44.00
Brampton	\$ 3.75	\$ 2.80	\$ 2.50	\$ 118.00	\$ 105.00	\$ 50.00
Mississauga	\$ 3.25	\$ 2.80	\$ 2.25	\$ 120.00	\$ 101.00	\$ 53.00
Durham	\$ 3.00	\$ 2.85	\$ 2.64	\$ 106.00	\$ 86.50	\$ 42.75
York	\$ 4.00	\$ 3.30	\$ 2.50	\$ 132.00	\$ 99.00	\$ 55.00
Average	\$ 3.15	\$ 2.56	\$ 2.13	\$ 104.43	\$ 86.21	\$ 46.11

- **Significantly lower fares than peers.**

- Community
- People
- Processes
- Finance



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## FARE POLICY

### Fare Structure Comparison

Municipality	Cash Premium	Ticket Concession		Monthly Pass Multiplier		
	Adult	Adult	Student	Adult	Student	Senior
London	45%	Base	81%	43	53	38
Hamilton	28%	Base	83%	44	44	13
Windsor	20%	Base	78%	38	34	25
Brampton	34%	Base	89%	43	42	20
Mississauga	16%	Base	80%	43	45	24
Durham	5%	Base	93%	38	33	17
York	21%	Base	76%	40	40	22
Average	23%	Base	83%	41	41	22

- **Similar structure to peers with the exception of Senior passes.**
- **Should address senior monthly pass multiplier.**

- Community
- People
- Processes
- Finance



## FARE POLICY

### Proposed Multi-year Fare Increases

Year	Cash	Ticket		Monthly Pass		
		Adult	Student	Adult *	Student	Senior
Utilization	11%	31%	8%	40%	5%	6%
Current	\$2.55	\$2.00	\$1.65	\$87.00	\$71.00	\$20.50
Sep-15	\$3.00	\$2.25	\$1.70	\$99.00	\$74.80	\$25.50
Sep-16	\$3.00	\$2.35	\$1.75	\$103.40	\$77.00	\$29.75
Sep-17	\$3.25	\$2.45	\$1.85	\$107.80	\$81.40	\$35.15
Sep-18	\$3.25	\$2.55	\$1.90	\$112.20	\$83.60	\$39.90

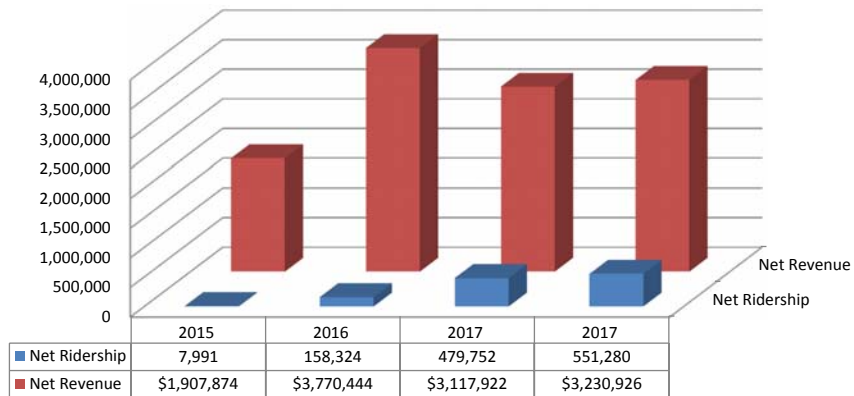
- 25 cents September 2015 followed by 10 cent increases for the next three years.
- Senior pass multiplier adjusted.
- Thereafter, adjusted by CPI as a minimum.
- Measure and monitor shifts in customer behaviour.

- Community
- People
- Processes
- Finance



## FARE POLICY

### Annual Impact of Fares & Service Increases





# TEN YEAR LOCAL TRANSIT STRATEGY

## Multi-year Financial Summary



- Community
- People
- Processes
- Finance



- **Service, Operating & Capital**

# MULTI-YEAR FINANCIAL SUMMARY

## Service, Operating & Capital

- Community
- People
- Processes
- Finance



2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	10 Year Total
	Deficiencies		Standards								
				Growth							
				Modal Split							
<b>SERVICE</b>											
Hours (000's)	814	16	34	34	39			299			422
Annual Operating (000's)	\$88,000	\$2,000	\$4,000	\$4,000	\$4,500			\$36,500			\$51,000
Full Time Equivalents	644	16	34	26	30			230			336
Fleet	221	8	17	5	11			85			126
Fares	\$2.00	\$0.25	\$0.10	\$0.10	\$0.10			TBD			
<b>OPERATING</b>											
Service Expenditures (000's)		\$800	\$3,500	\$4,800	\$4,500						
Fare Revenues (000's)		-\$1,910	-\$3,770	-\$3,120	-\$3,230						
Levy (000's)		-\$1,110	-\$270	\$1,680	\$1,270						
Annual Change to Levy		-0.14%	-0.03%	0.21%	0.15%						
<b>FUNDED CAPITAL (000's)</b>											
Fleet (Local)		\$8,700		\$2,650	\$2,030			\$16,710			\$30,090
<b>UNFUNDED CAPITAL (000's)</b>											
Fleet (BLAST)		\$6,875		\$5,300	\$5,420			\$39,280			\$56,875
Maintenance Storage Facility		\$5,000	\$10,000	\$25,000	\$80,000			\$80,000			\$200,000
Customer Experience		\$4,000	\$4,000	\$4,000	\$4,000			\$23,000			\$39,000
Corridor Capacity		\$200	\$200	\$200	\$200			\$5,200			\$6,000
<b>Total</b>		\$16,075	\$14,200	\$34,500	\$89,620			\$147,480			\$301,875

- **50% increase in service**

# TEN YEAR LOCAL TRANSIT STRATEGY Recommendations



- Community
- People
- Processes
- Finance



## RECOMMENDATIONS

1. Approve the 2015 to 2024 Ten Year Local Transit Strategy, including the following approvals for 2015 and 2016 to address system deficiencies:
  - a. \$6M dollars annualized (\$5.7M to be funded from fare increases and \$0.3M from levy) to be phased in over 2 years:
    - i. September 2015 \$0.8M (\$2M annualized);
    - ii. March 2016 \$1.5M (\$2M annualized); and
    - iii. September 2016 \$0.8M (\$2M annualized).
  - b. An additional 50 FTEs.
  - c. The addition of 25 buses to the fleet in 2015 at a capital cost of \$15.6M, to be funded as follows:
    - i. \$3M development charges;
    - ii. \$5.7M transit vehicle replacement reserve; and
    - iii. \$6.9M unfunded capital to be requested from Metrolinx as part of recommendation 4.
  - d. Delay the retirement of 10 buses at a capital cost of \$0.5M to be funded from the transit vehicle replacement reserve.

- Community
- People
- Processes
- Finance



## RECOMMENDATIONS

2. Approve new Service Standards for the objective implementation of service.
3. Approve the fare increases as detailed in this report, including the following fare increases aligned with service improvements:
  - a. 25 cents in September, 2015;
  - b. 10 cents in September, 2016, 2017 and 2018; and,
  - c. annual fare increases of at least CPI thereafter.
4. Develop a submission to Metrolinx for the unfunded capital requirements contained in the Ten Year Local Transit Strategy.

- Community
- People
- Processes
- Finance



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Public Works

## Transit Division

**TRANSIT PROGRAMS**



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**OVERVIEW OF SERVICES**

**Purpose / Function**

Operationalize an integrated transportation system which serves the entire city in an affordable, efficient, and accessible way. Our transportation system improves community health by reducing the need for automobile use and making it easy and attractive to utilize transit, walk, cycle, skateboard or roller-blade.

**Services Provided**

Conventional Transit                      Specialized Transit  
Rapid Transit

OPERATIONS DIVISION (\$000)	
2014 NET RESTATED BUDGET	54,355,840
2015 NET REQUESTED BUDGET	56,336,930
2015 NET CHANGE	1,981,090
2015 FTE	657.04



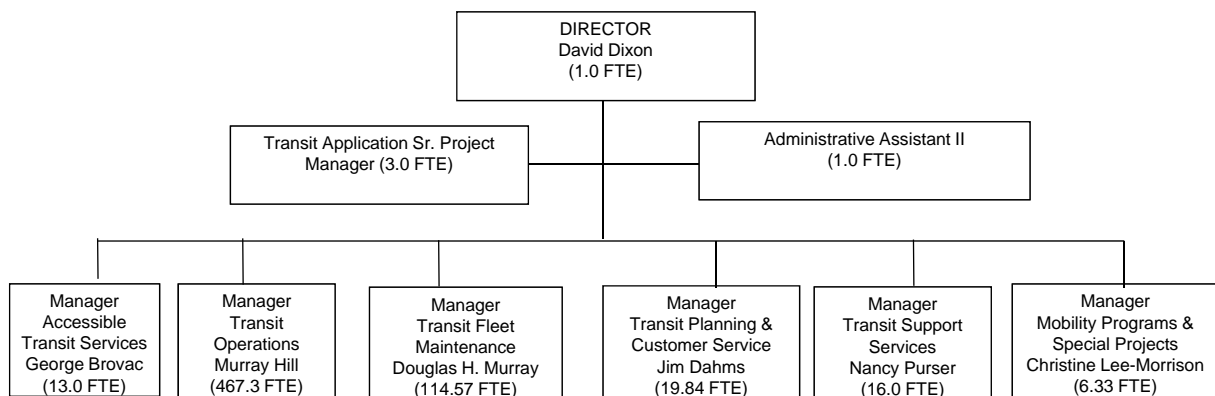
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**2015 KEY DELIVERABLES**

- AODA mandated service enhancements
- Rapid Ready - 10 year HSR service improvement implementation plan
- A & B Line Enhanced Bus Stations
- Transit shelter/landing pad program expansion, rehabilitation and accessibility
- Pan Am Transportation Logistics
- Transit shelter and bus advertising contract renewal
- PRESTO contract renewal
- Branding and Marketing strategy
- Implementation of culture change initiatives (Denison, PAD, Cutting Edge of Leadership)



**OVERVIEW**



Complement (FTE)	Management	Other	Total	Staff/Mgt Ratio
2014	7.00	647.04	654.04	92.43:1
2015	7.00	650.04	657.04	92.86:1
Change	0.00	3.00	3.00	



**2014 ACCOMPLISHMENTS - TRANSIT**

- AODA service enhancements in ATS (+66,000 Trips)
- Rapid Ready - HSR (+26,400 Hours)
- MTC Park 'n Ride
- Mohawk College Transit Hub Agreement
- A & B line enhanced stops construction award (10)
- Real time data available – platform departure displays, trip planner, bus check, open data
- 18 CNG Articulated buses
- 46 Expansion Bus Shelters
- All Pass agreement renewals (University, College, etc.)
- PRESTO Implementation – Third Party Network
- TransCab RFP awarded

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**TRANSIT****Services Provided & Key Facts**

- HSR Conventional Transit – provide 22.0 M trips
- Trans cab
- Transit Infrastructure - maintenance of 2,210 bus stops, 602 bus shelters, 19 loops and terminals, 1 Park n' Ride
- ATS – DARTS Contract Management – 665,000 trips
- Taxi Scrip

2015 Budget Request (\$000's)	
Operating Budget	
Gross	106,116
Revenues	(49,772)
Net	56,344
\$ increase from 2014	1,981
% increase from 2014	3.6%

2014 Budget R/C Ratio	45.30%
2015 Budget R/C Ratio	44.58%

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**2015 MAJOR COST DRIVERS FOR DIVISION**

<b>Description</b>	<b>(\$000s)</b>
Annualized Impact of 2014 approved Transit enhancement (PW14015)	747
DARTS Contract	760
Vehicle Reserve Council Approved OBRP Phase-in (Year 5 of 8)	513
Costs due to changes in McMaster Route Realignment	484
New Taxi Contract	61
NGV Station Maintenance	55
Route 56 – reduction of Tax Stabilization Contribution (PW12009b)	50
Fare Box Revenue Growth	(580)



**THANK YOU**



# Operations Division

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## OVERVIEW OF SERVICES



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**OVERVIEW OF SERVICES**

**Purpose / Function**

The Operations Division is responsible for operating and maintaining Public Works assets valued at approximately \$3.2B including 6,399 roadway lane kms; 2,382 kms of sidewalks; 98 kms of City owned alleyways, 392 bridges and major culverts; storm water management facilities, 42,891 catch basins and 169 storm water ponds. An integrated waste management system collecting and processing approximately 235,000 tonnes of materials annually including the operations and maintenance of 3 Transfer Stations/Community Recycling Centres (CRCs), Material Recycling Facility (MRF), Central Composting Facility (CCF), Glanbrook Landfill and 12 closed landfills..

**Services Provided**

Roads Operations Winter Control • Roadway & Sidewalk Infrastructure Maintenance • Capital Rehabilitation	Storm Water Facilities • Operation • Maintenance	Business Programs • Customer Service and Education • Data Management • Operational Efficiencies & Performance	Waste Management • Waste Collection • Downtown, BIA & Alleyway Cleanliness • Recycling & Waste Disposal • Contaminated Sites Management
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OPERATIONS DIVISION (\$000)	
2014 NET RESTATED BUDGET	92,863
2015 NET REQUESTED BUDGET	98,730
2015 NET CHANGE	5,867
2015 FTE	423.75

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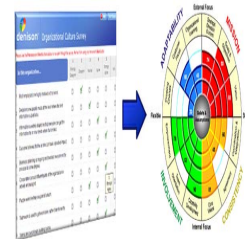
**2015 KEY DELIVERABLES**

**Delivering Service - Core programs**

- + Pan Am support

**Program Optimization Initiatives**

- Route rationalization (Winter Control, Waste Collection)
- Develop strategy for program base adjustments to reflect operating impacts from inventory growth for road networks and new storm water ponds (catch up & fwd)
- Staff Performance Management
  - Organization Structure and Business Improvements –recent reorganization
  - Employee Performance Management (Performance Accountability Development)
  - Implement Denison Culture Survey and Develop Action Plan & Vision / Mission
  - Next generation of Supervisor “Boot Camp”
  - Staff succession planning initiatives - *Managers, Superintendents & Supervisors Development*
- LEAN review pilots – process optimization
- Increase waste diversion through the continued expansion of the green cart program for eligible businesses and City facilities, optimization of the multi-residential diversion program & audits



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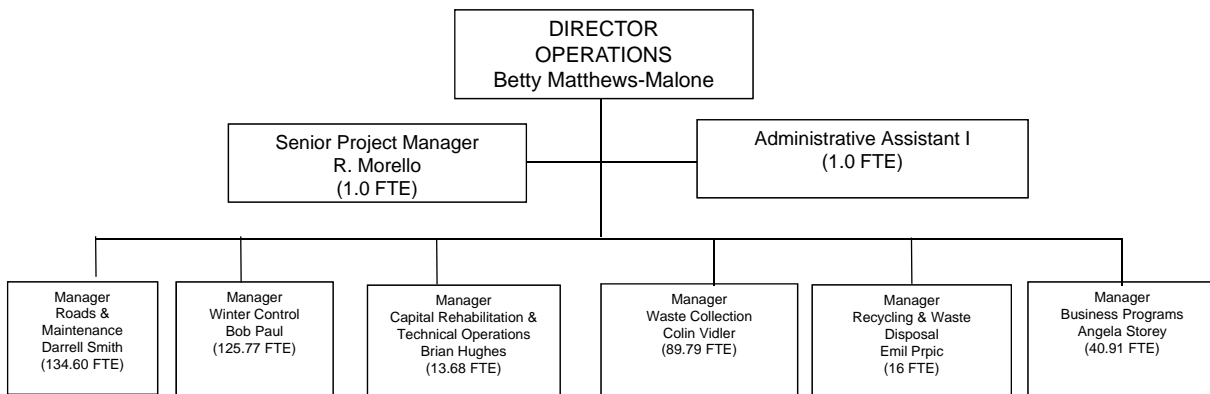
**2015 KEY DELIVERABLES con't.**

**Projects**

- Service Reviews
  - Alleyways
  - District East
  - Resurfacing equipment
- Glanbrook Landfill Stage 3 Development
- Automated Vehicle Location (AVL) tracking system for waste collection fleet as part of the City's corporate AVL system
- West Hamilton Closed Landfill
  - Chedoke Creek South Bank Stabilization
  - Leachate collector installation, bank re-vegetation, providing wildlife & stream habitat
- Central Composting Facility
  - New compost regulation impacts and risk if no bridging allowance
- Remediation of Central Park
- Inventories – continuation of cross culverts, retaining walls, fences, guiderails
- Inspections – sidewalk regulations
- Technologies –Hansen 8 migration and road classification link for road patrol



**OVERVIEW**



Complement (FTE)	Management	Other	Total	Staff/Mgt Ratio
2014*	7.0	416.75	423.75	59.54:1
2015	7.0	416.75	423.75	59.54:1
Change	0.0	0.00	0.00	

\* Restated for PW re-organization approved June 11, 2014 per Council Report PW14046



**2015 MAJOR COST DRIVERS FOR DIVISION**

Description		Amount (\$000s)
<ul style="list-style-type: none"> <li>Waste Collection Contracts (<i>increased service requests</i>)                             <ul style="list-style-type: none"> <li>- Escalation</li> <li>- Growth</li> </ul> </li> <li>Waste Disposal Contracts</li> <li>Municipal Law Enforcement Illegal Dumping Project cost allocation (PED11127f/PW11051g)</li> <li>Storm water Management</li> </ul>	<p>545</p> <p>385</p>	<p>930</p> <p>360</p> <p>200</p> <p>1,070</p>
<b>Winter Season</b>		
<ul style="list-style-type: none"> <li>Winter Control</li> <li>Winter Maintenance</li> </ul>		<p>1,721</p> <p>176</p>
<b>Revenues</b>		
<ul style="list-style-type: none"> <li>Recycling Revenues</li> <li>TS/CRC Revenues</li> <li>Reduction in HRPI recoveries and dividends revenue</li> </ul>		<p>386</p> <p>174</p> <p>100</p>

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# ROADS



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**2014 ACCOMPLISHMENTS - ROADS**

- Some key deliverables (as of Sept. 2, 2014):
  - 11,800 sq. m of sidewalk replaced
  - 6,583 trip hazards removed by leveling
  - 71 km of rural road resurfacing
  - 43 km of road side ditching
  - 46,100 lane km of sweeping
  - 28,000 service requests received and investigated (Winter and Summer)
  - Preparation for 2015 Pan Am Games
- Implement 2014 Enhancements
  - Catch basin inspection and cleaning initiative
  - Road Patrol program improvements
- Managing Unplanned Infrastructure Contingencies, e.g.
  - Escarpment Failures, Sydenham & Kenilworth
  - Marston Street Bridge Failure
  - Ice Storm and Winter Clean up
  - Additional Area Rating / Capital Funding works completed
- Supervisor “Boot Camp”
- *Winter of 2014...*



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**ROADS**

**Services Provided**

**Infrastructure & Maintenance Program**

- Road Patrol & Inspection of Roadway infrastructure
- Repairs to roads, sidewalks, bridges, culverts
- Surface maintenance (sweeping & flushing)
- Maintenance to gravel Road shoulder & ditches
- Collection of roadside litter/dumping
- Mowing rural roadsides and boulevards
- Removal of Hazards (e.g. debris on roadways)
- Catch Basin Inspection, cleaning and repair
- Accident & Emergency Response
- Neighbourhood Clean Program (Adopt-a-Road)
- Road Closures (permanent and temporary)
- Emergency Response

**Storm Water Management Facility Maintenance**

- Inspections, maintenance repair and rehabilitation

**Capital Rehabilitation & Technical Operations**

- approx. \$14M in minor capital & rehabilitation works
- Shoreline protection

**Winter Control Program**

- Winter road patrol, materials application, ploughing, snow removal/disposal
- Sidewalk clearing for municipal & school properties

2015 Budget Request (\$000s)	
Operating Budget	
Gross	58,532
Revenues	(1,327)
Net	57,205
\$ increase from 2014	3,100
% increase from 2014	5.7%

Cost per household 2014	247.61
Cost per household 2015	259.22
% Change from 2014	4.7%



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# Winter Control Program Approved Service Levels

Winter Control Level of Service Standards									
Road Classification		Surface Condition		Snow Accumulation		Treatment			
Type	Priority	Target Surface Condition	Response Time	Target Response	Completion Time	Anti-Icing	De-icing	Salt	Sand/Salt
Linc/Arterials	1	Bare	Immediate	2.5 cm	4 hrs	*	*	*	*
Escarpment Crossings	1	Bare	Immediate	5 cm	4 hrs	*	*	*	*
Primary Collectors e.g. Whitney Ave	2A	Bare	4 hrs	8 cm	8 hrs		*	*	*
Secondary Collectors e.g. Fletcher Rd	2B	Centre Bare	4 hrs	8 cm	8 hrs		*	*	*
Rural Roads Hard Surface e.g. Golf Club Rd	3	Centre Bare	8 hrs	10 cm	24 hrs				*
Residential e.g. Ravina Cres	3R	Bare	8 hrs	8 cm	24 hrs		*	*	*
Loose-top Rural Roads e.g. Trimble Rd	3	Snow Packed	12 hrs	10 cm	24 hrs				

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## Public Works – Operations Division

2015 Budget

### WINTER CONTROL PROGRAM (WCP)

Operating Budget History			
Year	Budget*	Actuals*	Variance
2005	17,475,180	25,146,486	(7,671,306)
2006	19,894,140	13,119,669	6,774,471
2007	20,125,980	26,984,343	(6,868,363)
2008	24,106,992	32,289,976	(8,182,984)
2009	24,262,205	21,862,546	2,399,659
2010	22,628,529	16,605,231	6,022,998
2011	23,656,220	24,504,797	(838,737)
2012	21,271,010	16,731,900	4,529,270
2013	21,578,760	26,263,060	(4,684,300)
2014	22,749,570	30,750,000**	(8,000,000)
2015	24,471,400		

\*EXCLUDES RESERVE CONTRIBUTIONS

\*\* Estimated at January 6, 2015



# WASTE COLLECTIONS



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## 2014 ACCOMPLISHMENTS – COLLECTION

- Waste collection service levels and collection contract approved for 2013-2020 service period, collecting over 179,000 tonnes of materials annually at the curb
- 26 million 'stops' – 156,000 service requests
- First full year of implementation of new waste collection system
  - Leaf & yard waste & Bulk – 52 week collection
- Cooperated with Municipal Law Enforcement Section to address illegal dumping throughout the City
- Expanded Cleanliness Program to adopt a proactive approach for alleyway cleanliness and enhanced sidewalk sweeping services for satellite BIAs
- Assisted with tree branch removal resulting from the Ice Storm



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**WASTE COLLECTION**

**Services Provided**

- Waste Collection program handling 176,000 tonnes per year of residential waste
- Organics (green cart), Recycling, Leaf and Yard Waste, Garbage and Bulk waste collection
- Street-side public space container collection
- Festival & Special Events Waste Diversion
- Cleanliness Programs and Clean City Initiatives

2015 Budget Request (\$000s)	
Operating Budget	
Gross	29,927
Revenues	(57)
Net	29,870
\$ increase from 2014	1,464
% increase from 2014	5.2%

Cost per household 2014	130.00
Cost per household 2015	135.35
% Change from 2014	4.2%

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**RECYCLING AND WASTE DISPOSAL**



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**2014 ACCOMPLISHMENTS - WASTE MANAGEMENT**

- Executed contract extension for the operation of the City’s Household Hazardous Waste program
- Completed an interactive customer survey focusing on service at the City’s Community Recycling Centres
- Implemented collection and processing of mixed rigid plastics at Community Recycling Centres
- Partnered with Region of Peel for the conversion of cooking oil to biodiesel
- Pump station re-location with infrastructure upgrades for the development of stage three at Glanbrook Landfill
- Won SWANA silver Excellence Award for recycling
- Generated \$1M in revenues from the processing of merchant capacity organics at the CCF
- +262,000 vehicle visits at Transfer Stations and Community Recycling Centres
- Processed 46,000 tonnes of blue box material at MRF and 54,900 tonnes of green cart organics and leaf and yard waste at two composting sites
- Landfilled 141,000 tonnes of waste at the Glanbrook Landfill



**RECYCLING AND WASTE DISPOSAL**

**Services Provided :**

- Household Hazardous Waste program
- Transfer Stations (3) and Community Recycling Centres (3)
- Leaf and Yard Waste compost site
- Glanbrook Landfill Site
- Central Composting Facility (CCF)
- Materials Recycling Facility (MRF)
- Monitoring and remediation of closed landfill sites (12)
- Site remediation services for other sections
- Management of Contaminated Sites Program for Public Works
- Commodity Revenues - MRF

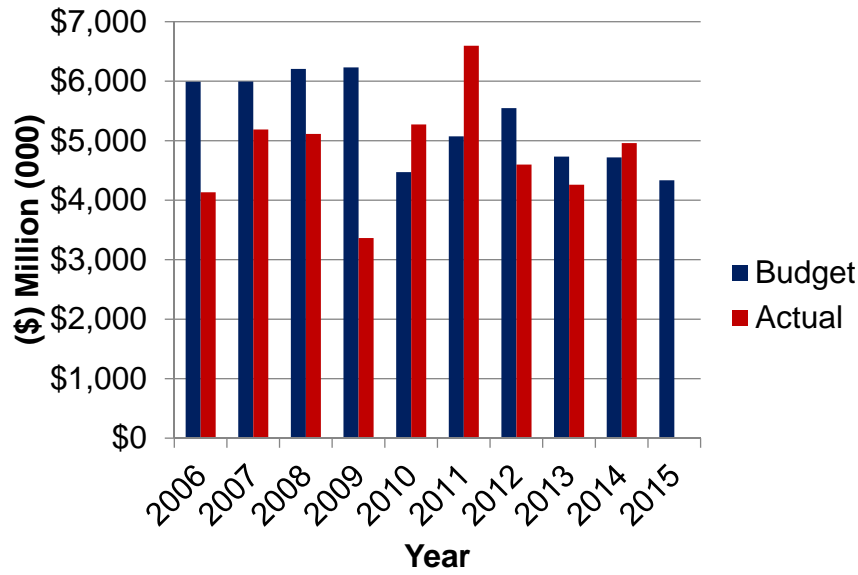
2015 Budget Request (\$000s)	
Operating Budget	
Gross	20,991
Revenues	(13,501)
Net	7,490
\$ increase from 2014	1,077
% increase from 2014	16.8%

Cost per household 2014	29.35
Cost per household 2015	33.94
% Change from 2014	15.6%





**RECYCLING PROGRAM REVENUES**



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**Business Programs**



City of Hamilton Waste Management Services												
Service	Area	Rate	Frequency	Notes	Start Date	End Date	Start Date	End Date	Start Date	End Date	Start Date	End Date
Residential	City	\$10.00	Weekly	Includes curbside recycling	01/01/13	12/31/13	01/01/14	12/31/14	01/01/15	12/31/15	01/01/16	12/31/16
Commercial	City	\$25.00	Weekly	Includes curbside recycling	01/01/13	12/31/13	01/01/14	12/31/14	01/01/15	12/31/15	01/01/16	12/31/16
Industrial	City	\$50.00	Weekly	Includes curbside recycling	01/01/13	12/31/13	01/01/14	12/31/14	01/01/15	12/31/15	01/01/16	12/31/16

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**BUSINESS PROGRAMS**

**2014 Accomplishments**

- 229,000 customer service requests
- 87,000 work orders generated for activity based costing purposes
- 100 training courses and programs coordinated
- 17,142 volunteers engaged in “Team Up to Clean Up” programs, 34,000 volunteer hours and a value of nearly \$1 million
- Graffiti management strategy pilot projects presented to GIC and received support to implement
- Awarded a SWANA bronze excellence award for public education related to our grey cart pilot project (multi-res)
- 1491 properties visited for gold box audits with a 47% win rate
- 85% of multi-res buildings re-engaged and using green carts and blue carts for waste diversion
- 566 commercial properties visited to discuss the benefits of waste diversion
- 5230 students and community members attend 68 presentations to learn about waste diversion



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**BUSINESS PROGRAMS**

- Customer Service representatives for Division
- Support client field operations through data entry, data management, analysis and performance metrics
- Community outreach and education
- Plan, develop and implement programs and strategies to improve effectiveness and efficiency
- Support operational divisions by coordinating policy and procedures, audits and reports

2015 Budget Request (\$000s)	
Operating Budget*	
Gross	4,184
Revenues	(16)
Net	4,168
\$ increase from 2014	226
% increase from 2014	5.7%

Cost per household 2014	18.04
Cost per household 2015	18.88
% Change from 2014	4.7%

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**Thank You**

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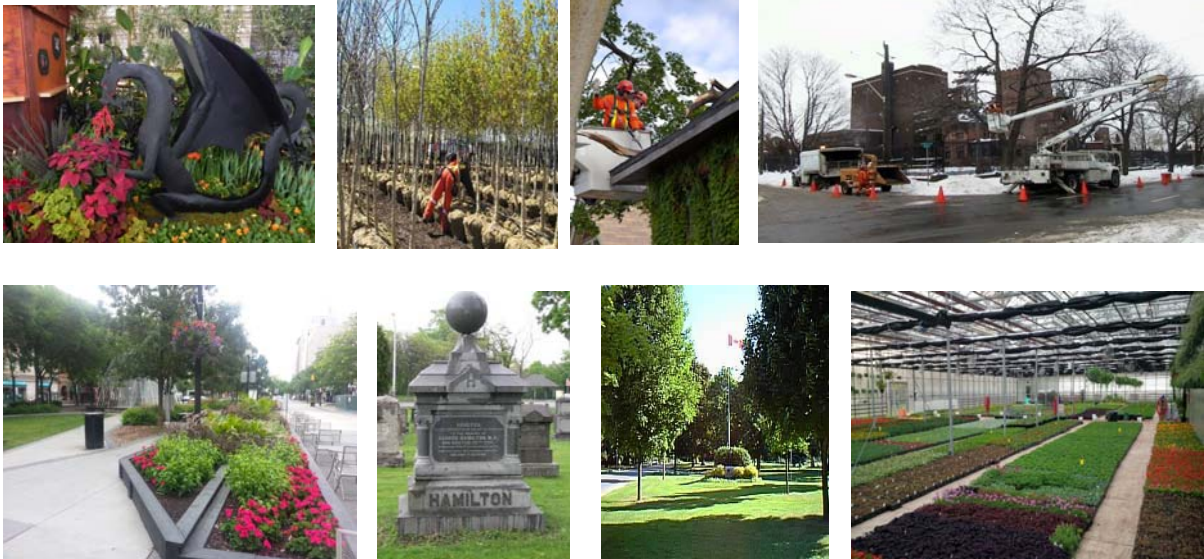


**Environmental Services Division**

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**OVERVIEW OF SERVICES**



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**OVERVIEW OF SERVICES**

**Purpose / Function**

The Environmental Services Division is responsible for operating and maintaining public works assets including: 501 acres (203 hectares) of municipal cemeteries at 69 sites; trees on City streets and parks; horticultural features in 282 floral traffic islands, 89 medians/boulevards/laybys, 52 civic properties, 4,231 acres (1,712 hectares) of municipal park, shared school park and open space at 511 sites.

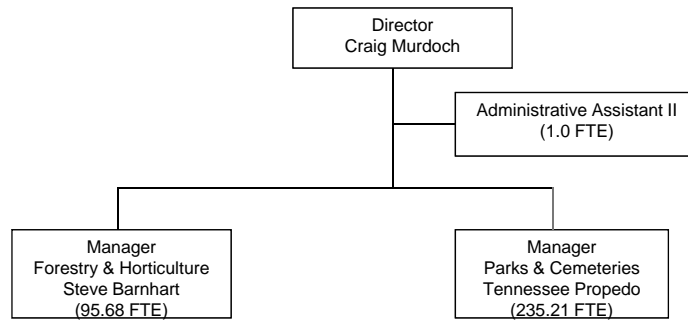
**Services Provided**

<b>Forestry</b>	<b>Parks</b>
<b>Horticulture</b>	<b>Maintenance</b>
	<b>Cemeteries</b>

ENVIRONMENTAL SERVICES (\$000)	
2014 NET BUDGET	32,204
2015 NET REQUESTED BUDGET	32,594
2015 NET CHANGE	390
2015 FTE	332.89

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## OVERVIEW



Complement (FTE)	Management	Other	Total	Staff/Mgt Ratio
2014*	3.00	329.89	332.89	110:1
2015	3.00	329.89	332.89	110:1
Change	0.00	0.00	0.00	

\*Restated for PW re-organization approved June 11, 2014 per Council Report PW14046

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## PROGRAM SPECIFIC INFORMATION

- Forestry and Horticulture – Steve Barnhart
  - Tree maintenance, health, storm response, planting
  - Emerald Ash Borer program
  - Plant production, design, planting and maintenance of horticultural features, horticultural shows
- Parks and Cemeteries – Tennessee Propedo
  - Parks, trail and waterfront maintenance
  - Cemetery sales, interments and site maintenance

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**2014 ACCOMPLISHMENTS – FORESTRY / HORTICULTURE**

**Forestry**

- Responded to 35,886 service requests in 2014 (22,000 storm related)
- 7,974 trees planted
- 1,989 trees removed in 2014
- Responded to 2 storm events; 13,573 calls + 5,266 request for brush pickup
- 18 grids trimmed
- Forestry building renovations substantially complete



**Horticulture**

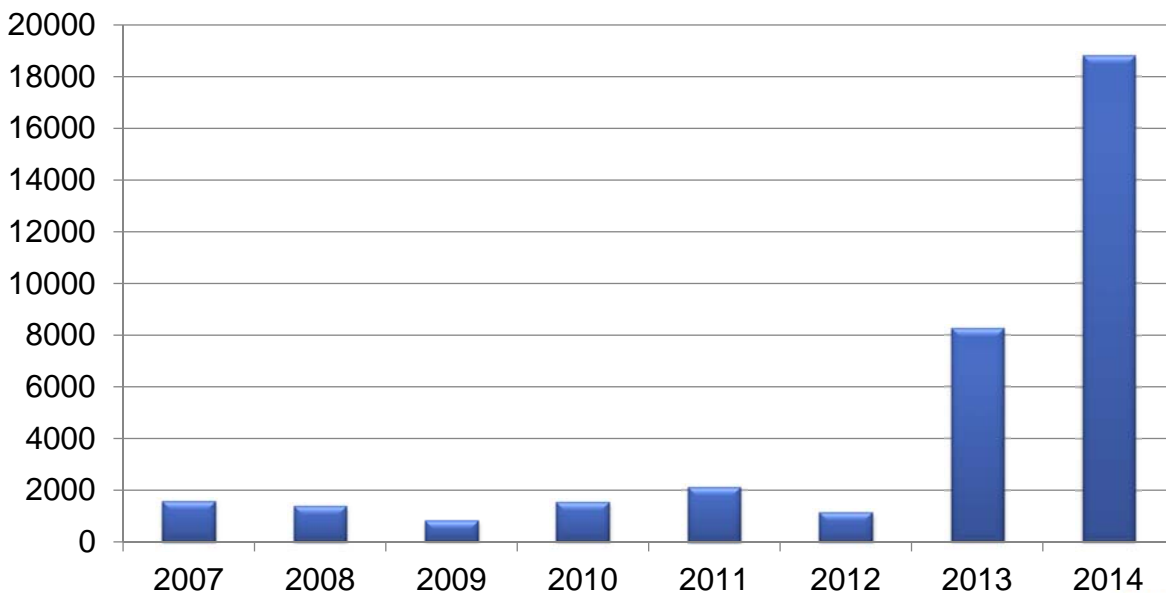
- Annual flower production = 205,000
- 94th Annual Mum Show to be held in October
- Spring Tide bulb show held in March



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**2013/2014 FORESTRY TREE DAMAGE BY YEAR**

**Tree Damage Calls**



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**FORESTRY****Services Provided & Key Facts**

Plants, maintain, and care for City owned trees growing along road allowances, in parks, and open spaces. On call 24/7, staff respond to emergency storm damage across the City. Services include

- Street Tree Trimming – 155,000 in the urban roadway right of way (ROW)
- Tree Removals
- Stump Removals
- Street Tree Planting
- Parks Tree Planting
- Emergency Response
- Forest Health Program
- Urban Forestry Protection
- Customer Service

2015 Budget Request (\$000s)	
Operating Budget	
Gross	9,571
Revenues	(1,895)
Net	7,676
\$ increase from 2014	109
% increase from 2014	1.4%

Cost per household 2014	34.63
Cost per household 2015	34.78
% Change from 2014	0.4%

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Hamilton 125

**HORTICULTURE****Services Provided & Key Facts**

Plans & delivers various operating and maintenance services to beautify the City through streetscape & park horticultural features including:

- Design and planting of floral traffic Islands (287) planters (307) and roundabouts (62) traffic medians(89)
- Hanging baskets (640)
- Provide horticulture maintenance for 7 BIA's
- Park floriculture Displays
- Annual Mum Show event and showcase of the Section's programs
- Spring Tide Show
- Green House Production
- City building garden maintenance at 52 civic properties

2015 Budget Request (\$000s)	
Operating Budget	
Gross	3,644
Revenues	(141)
Net	3,503
\$ increase from 2014	14
% increase from 2014	0.4%

Cost per household 2014	15.97
Cost per household 2015	15.87
% Change from 2014	(0.6%)

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**2014 ACCOMPLISHMENTS - PARKS / CEMETERIES****Parks**

- 51,020 acres of general parkland grass cut
- 3,462 Sports fields mown
- 4,528 Ball diamonds mown
- 33,838 acres of grass trimmed
- 128,735 garbage cans emptied
- 2,635 play structure inspections
- 87,422 general park and sports park washrooms units cleaned
- 4 Christmas displays installed and removed (Gore Park, City Hall, Dundas, Ancaster)
- 2 pilots run (phragmites removal and tablet based field inspections)

**Cemeteries**

- 67 sites maintained
  - 498 acres (202 hectares)
  - 20 sites with available land
- 4 sites signs converted from wood to granite
- 1,202 Interments (includes traditional and cremated)



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Hamilton 127

**PARKS****Services Provided & Key Facts**

Plans and delivers operations and maintenance services for 1,712 hectares (4,231 acres) of municipal park and open space properties at 511 sites. Services include:

- Turf maintenance
- Playground inspections & repairs (271 playgrounds with 294 play structures, 61 Spray pads)
- Litter control and garbage pick up
- Playing field maintenance
- General Grounds and Trails Maintenance (over 65 km of trails)
- Special Event Support
- Seasonal displays
- Customer Service

2015 Budget Request (\$000s)	
Operating Budget	
Gross	19,231
Revenues	(241)
Net	18,990
\$ increase from 2014	191
% increase from 2014	1.0%

Cost per household 2014	86.04
Cost per household 2015	86.05
% Change from 2014	0.0%

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Hamilton 128



**CEMETERIES****Services Provided & Key Facts**

For 2015 -Plan and deliver operations and maintenance for 501 acres of municipal cemeteries at 69 locations. Services include:

- Input and storage of records of all burials in municipal cemeteries
- Internments
- Monument Foundation Installations
- Perpetual Care
- Grounds Maintenance
- Marketing and Development
- Full range of customer services
- Regulatory compliance

2015 Budget Request (\$000s)	
Operating Budget	
Gross	4,554
Revenues	(2,129)
Net	2,425
\$ increase from 2014	76
% increase from 2014	3.2%

Cost per household 2014	10.75
Cost per household 2015	10.99
% Change from 2014	2.2%

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Hamilton 129

# Thank You

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**2015 BUDGET**

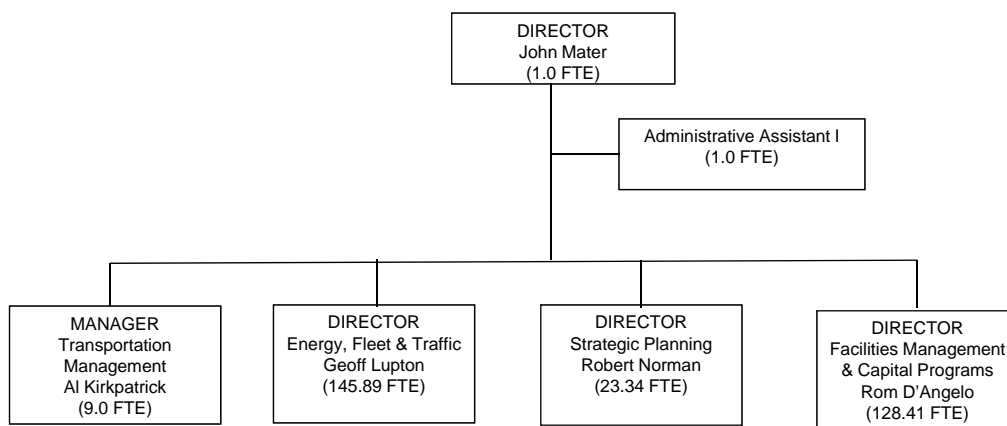
# Corporate Assets & Strategic Planning



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**OVERVIEW**



Complement (FTE)	Management	Other	Total	Staff to Mgt Ratio
2014	13	295.64	308.64	22.74:1
2015	13	295.64	308.64	22.74:1
Change	0.0	0.0	0.0	



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## PROGRAM SPECIFIC INFORMATION

- Energy, Fleet and Traffic – Geoff Lupton
  - Office of Energy Initiatives
  - Central Fleet
  - Traffic Operations and Engineering
- Strategic Planning – Robert Norman
  - Landscape Architect Services
  - Policy and Programs
  - Waterfront Development
- Facilities Management and Capital Programs – Rom D’Angelo
  - Strategic Planning, Capital and Compliance
  - Facilities Operations and Technical Services ~ Community and Corporate Buildings
  - Sport and Entertainment
- Transportation Management– Al Kirkpatrick
  - Pedestrian, Cycling, Transportations Demand (TDM)
  - Transportation Management



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## MAJOR COST DRIVERS

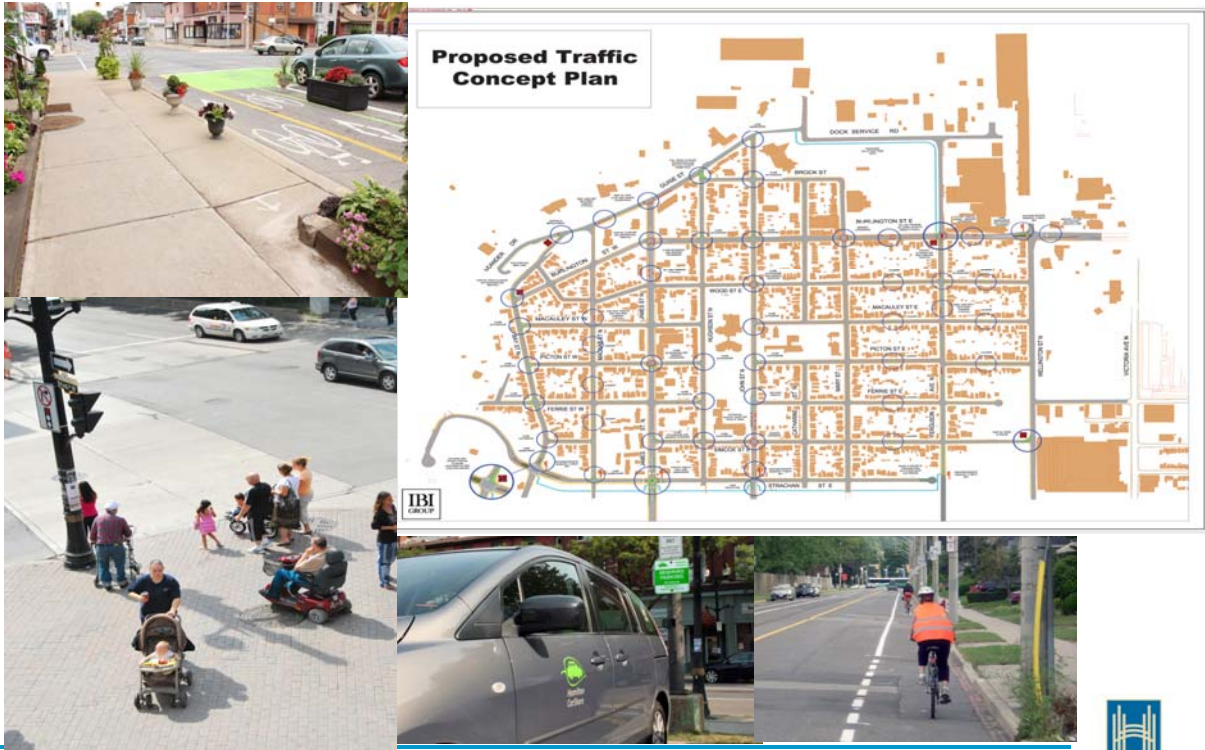
Description	Amount (000's)
Court House Lease	1,535
Facilities Contractual Services (Snow Removal ; Building Cleaning , majority of this is recovered)	480
Facilities Building Repairs – increased to reflect historical actuals, majority of this is recovered	1,100
Facility Recoveries from User Groups	(1,118)
Contractual (Confederation Park)	209



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## TRANSPORTATION MANAGEMENT



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## TRANSPORTATION MANAGEMENT – TEAM OVERVIEW

- To develop policies and strategies in collaboration with key internal/external stakeholders for the City's transportation network and infrastructure to 2031 and beyond.
- The goal is to provide the needs to support the City's economic development and resident's quality of life.
- The elements of Transportation Management support Complete Streets initiatives including roads, transit, cycling, walking and determining the highest and best use of the City's infrastructure to support Goods Movement via roads, rail, marine and aviation facilities.
- In addition to the high level, long-term approach to transportation management, the group is also involved in several key, in-year and short term implementation projects.

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## 2014 ACCOMPLISHMENTS

### Transportation Management

- Bike Share (105 Stations)
- Updated Transportation Master Plan awarded
- 35km cycling lane expansion
- Completion of Garth, Garner, Rymal Class EA
- Cannon Bi-Directional Cycle Track

## 2015 KEY DELIVERABLES

- Permanent traffic calming features of the North End Transportation Management Plan
- Pan Am Transportation Logistics
- City-wide Transportation Master Plan
- Expand cycling lane inventory
- Bike share program
- Transportation Demand Management (TDM) programs

**TRANSPORTATION MANAGEMENT**

**Services Provided & Key Facts**

- Area Specific Transportation Management Plans/Projects following the EA Process
  - Centennial Neighbourhoods TMP
  - Highway 403 Ramp
  - Various Neighbourhood Action Plans
- City-wide Transportation Master Plan Update
  - Including one way street network
  - Extensive public engagement
- Transportation Demand Management (TDM) Programs
  - Smart Commute – Hamilton (90,000 employees)
  - Active Transportation Initiatives
    - Cycling
    - Pedestrian Mobility
    - Safe Routes to School
- Special Projects
  - Niagara to GTA (NGTA) – Western Golden Horseshoe Municipal Network
  - Pan Am Transportation

2015 Budget Request (\$000's)	
Operating Budget	
Gross	1,260
Revenues	(1,176)
Net	84
\$ increase from 2014	0
% increase from 2014	0%

2014 Cost per Household	\$0.39
2015 Cost per Household	\$0.38

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**FACILITIES MANAGEMENT & CAPITAL PROGRAMS**

FACILITIES O&M



**CAPITAL AND COMPLIANCE**

GOLF



RECREATION



FACILITIES



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**FACILITIES MANAGEMENT & CAPITAL PROGRAMS**

**Inventory of 500+ Core Facilities**

- ❑ CORPORATE FACILITIES
  - ✓ City Halls
  - ✓ Town Halls
  - ✓ Fire Stations
  - ✓ Libraries
  - ✓ Yards
  - ✓ Cemeteries
  - ✓ Leased Corporate Facilities
  - ✓ Civic Properties
  - ✓ Libraries
- ❑ RECREATION FACILITIES
  - ✓ Recreation Arenas
  - ✓ Recreation Centers
  - ✓ Indoor/Outdoor Pools
  - ✓ Community Halls
  - ✓ Park Buildings
  - ✓ Golf Operations
- ❑ ENTERTAINMENT FACILITIES
  - ✓ Cops Coliseum
  - ✓ Hamilton Place
  - ✓ Convention Centre
  - ✓ Tim Horton's Field



**Facility Information**

- ❑ \$1.5 BILLION IN ASSETS
- ❑ 7.5 MILLION IN SQUARE FEET
- ❑ \$10.68 MILLION IN 2015 BLOCK FUNDING
  - ✓ Recreation \$ 5,100 M
  - ✓ Corporate \$ 4,580 M
  - ✓ Entertainment Facilities \$ 1,000 M
- ❑ \$46.3 MILLION CAPITAL (Gross) (recommended)
  - ✓ POA Relocation \$ 27 M
  - ✓ Bernie Morelli Centre \$ 19 M (multi-year project)

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**FACILITIES MANAGEMENT & CAPITAL PROGRAMS**

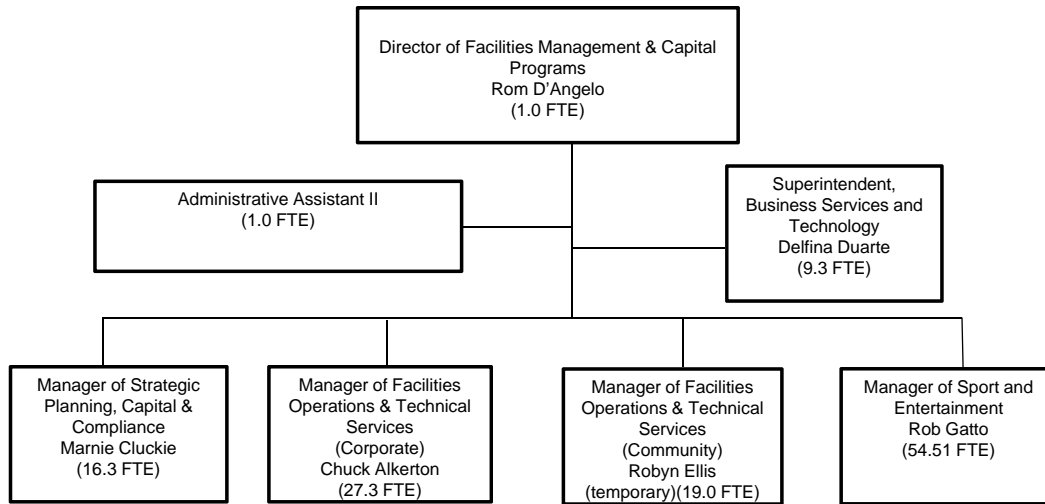
Facility Management is defined as the Integration of people, places and process in order to manage the City's Building Environment;  
 Facility Management is based on using 11 IFMA core competencies:

11 IFMA Core Competencies	
1) Communication	7) Operations and Maintenance
2) Emergency Preparedness and Business Continuity	8) Project Management
3) Environmental Stewardship and Sustainability	9) Quality Management Program
4) Finance and Business	10) Real Estate And Property Management
5) Human Factors	11) Technology
6) Leadership and Strategy	

\* IFMA ~ International Facility Management Association

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**FACILITIES MANAGEMENT & CAPITAL PROGRAMS**



Complement (FTE)	Management	Other	Total	Staff to Mgt Ratio
2014	4.0	124.41	128.41	31.1:1
2015	4.0	124.41	128.41	31.1:1
Change	0.0	0.0	0.0	

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**2014 ACCOMPLISHMENTS – FACILITIES MANAGEMENT AND CAPITAL PROGRAMS**

**Grand Openings**

- Ancaster Senior Achievement Centre (ASAC)
- Rosedale Pool
- Westdale Tennis Court
- Lawn Bowling and Tennis Clubhouses



**Completion**

- 28 Lister Restaurant rfp
- Tim Hortons Field
- Finalized 20 Year Licence Agreement with the Tiger Cats
- Sackville Senior Centre



**Demolition Phase (Permits & Tender Issued)**

- Dominion Glass Site
- Cooperative Procurement (City & HWDSB) Scott Park Site

**Publication**

- Spectacular Golf Ontario
- Fairways Magazine (Spring 2014) – Chedoke Celebrates Municipal Milestone
- Fairways Magazine (Summer 2014) – Course of the week: King's Forest Golf Club



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**2015 KEY DELIVERABLES**

- Golf Business Plan Update
- Surplus of Properties
  - 52 – 56 Charlton (Lynwood Charlton)
  - Waterdown Library (on Mill Street)
- Grand Opening of the following Facilities:
  - Green Acres Outdoor Pool
  - Waterdown Library & Senior Recreation Centre
- Freelton Outdoor Ice-Rink
- Waterdown Outdoor Ice-Loop
- Demolitions (Before Pan Am Games):
  - Scott Park Arena and School Site
  - Dominion Glass Site
- Courthouse Renovation (District Energy Satellite Site)
- Strategic Marketing Plan (Tim Hortons Field)



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**FACILITIES MANAGEMENT & CAPITAL PROGRAMS**

**Services Provided & Key Facts**

- Customer Service Management
- Facilities O&M (HVAC, plumbing, electrical, etc.)
- Capital Planning
- Project Management
- Legislative & Code Compliance
- Accommodations Services
- Leasing
- Property Management
- Preventative Maintenance
- Custodial
- Demolitions
- Procurement Services
- Help Desk
- Quality Management Program
- Technology Solutions
- Boardroom Bookings
- Access Management
- Golf and Turf Management
- Stadium Operations
- Pesticide Controls (Golf Courses only)
- Liaise between 3<sup>rd</sup> Party Operators



2015 Budget Request (\$000s)	
Operating Budget	
Gross	\$17,528
Revenues	(\$10,949)
Net	\$6,579
\$ increase from 2014	\$1,857
% increase from 2014	39.3%

Cost per household 2014	\$21.61
Cost per household 2015	\$29.81
% Change from 2014	37.9%

\* Court House Lease Lost Revenue = \$1.5 Million

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**OVERVIEW OF SERVICES ~ STRATEGIC PLANNING**

**Landscape Architectural Services**

**Policy & Programs**

**Waterfront Development**



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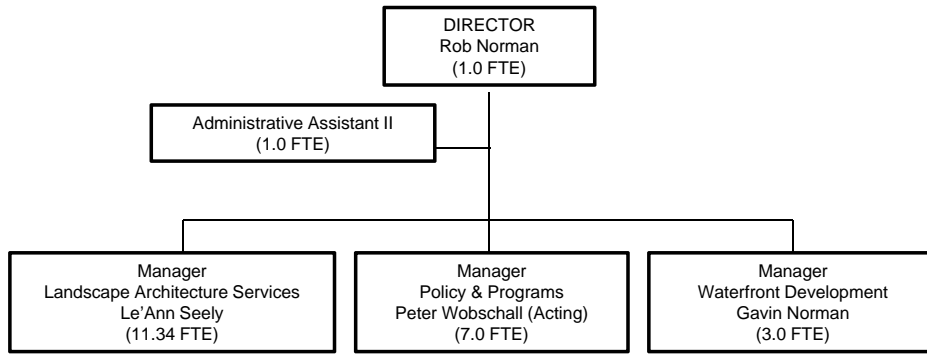
**STRATEGIC PLANNING –TEAM OVERVIEW**

The Strategic Planning Team is responsible and accountable for developing and delivering sustainable infrastructure plans based on Council's Strategic Plan, implementation of City parks and open spaces, waterfront development and defining strategic direction with respect to agreements, pilot projects and departmental priorities.



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**OVERVIEW**



Complement (FTE)	Management	Other	Total	Staff to Mgt Ratio
2014	4.0	19.34	23.34	4.8:1
2015	4.0	19.34	23.34	4.8:1
Change	0.0	0.0	0.0	

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**LANDSCAPE ARCHITECTURAL SERVICES**

**2014 Accomplishments**



**Gore Pedestrianization Initiative - Ph. 1 Veterans' Place**



**Crown Point East Park**



**Binbrook Fairgrounds Community Park Skate Park**



**Gage Park Fountain Terraces**



**Confederation Park Phase 1 Trail Development**

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**POLICY & PROGRAMS**

**2014 Accomplishments**

- Finalized Burlington Heights Management Plan for the Cootes to Escarpment EcoPark System
- Implemented Food Truck Pilot Program in 7 City Parks
- Planned and implemented “Up Your Alley” pilot program in Ward 2
- Received and processed 6 Facility Naming requests including the Bernie Morelli Centre and Harry Howell Arena
- Confederation Park operating model review, renegotiation of tenant leases, and capital improvements to Sandbox Sports
- Coordinated Street Furniture Program Phase I – bus bench contract renegotiation with Creative Outdoor Advertising to beautify streetscape for the 2015 Pan Am Games



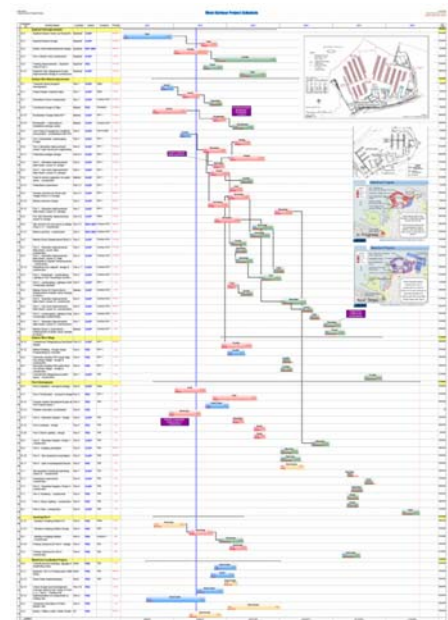
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**WATERFRONT DEVELOPMENT**

**2014 KEY ACCOMPLISHMENTS**

- Pier 7 Shoreline & Transient Docks, concept, design and construction tender
- Repairs to Pier 4 earth pier washout areas, construction tender
- Concept Plan for the future Pier 8 Park integrating the new Pumping Station and Underground Storage Tank - Completed
- Functional Plan for the new Harbour West Marina Dock Layout - Completed
- Establishment of the new Waterfront Development team
- Developed Master Gantt Chart scheduling principal projects and their dependencies



Gantt Chart – Waterfront Projects 2014 - 2018

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**LANDSCAPE ARCHITECTURAL SERVICES**

**2015 KEY DELIVERABLES**

- Completion of Gore Park Phase 1 construction
- Commence construction of Beasley Park
- Commence construction of William Connell Park
- Commence detailed design of Brian Timmis replacement field site

**2015 Work plan includes:**

- 27 Park Development Projects
- 26 Park Redevelopment Projects
  - 2 Neighbourhood Action Plan
  - 1 Downtown (3 Phases)
  - 1 Shoreline protection with land acquisition



Gore Pedestrianization Initiative

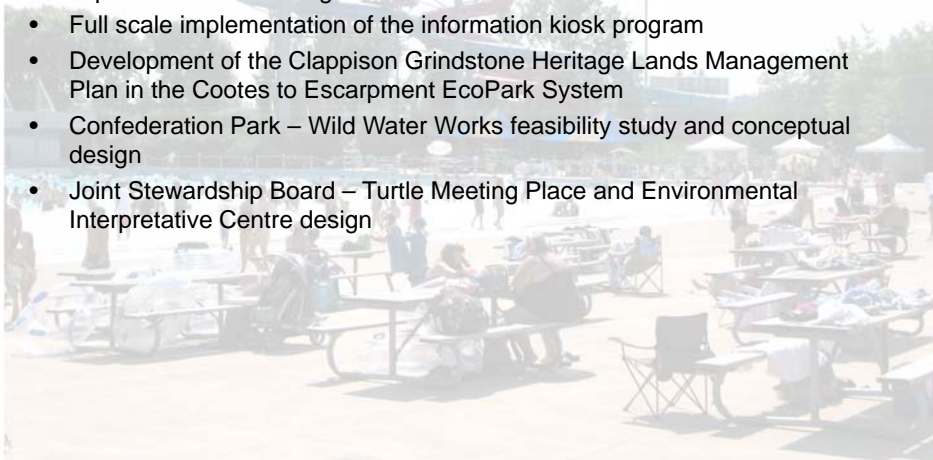


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**POLICY & PROGRAMS**

**2015 KEY DELIVERABLES**

- Coordinated Street Furniture Program Phase II – design and implementation
- Revenue generating advertising program on the Lincoln M. Alexander Parkway
- Review of Hess Village Mall Authority service agreement and beautification improvements on George Street
- Full scale implementation of the information kiosk program
- Development of the Clappison Grindstone Heritage Lands Management Plan in the Cootes to Escarpment EcoPark System
- Confederation Park – Wild Water Works feasibility study and conceptual design
- Joint Stewardship Board – Turtle Meeting Place and Environmental Interpretative Centre design



Street Furniture



Highway Advertising



George Street



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**WATERFRONT DEVELOPMENT****2015 KEY DELIVERABLES**

- Construction of the Pier 7 Shoreline & Transient Docks
- Harbour West Marina Breakwater – design & tender
- Design of Shoreline Improvements & phase 1 tender
- Design of New Marina Docks and phase 1 tender
- Design of Future Streets & Infrastructure for Pier 8
- Functional Plan Pier 6-7 Marina Village & Square



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**STRATEGIC PLANNING****Services Provided & Key Facts****Landscape Architectural Services**

- Provides professional planning, design, and construction administration services for parks, recreational trails, and open spaces
- LAS enhances the environment and recreational opportunities for the citizens of Hamilton

**Policy & Programs**

- Develops and implements programs and strategic directions to improve effectiveness and efficiency
- Programs foster opportunities in environmental stewardship, innovation & urban initiatives

**Waterfront Development**

- Professional design and construction administration for waterfront projects
- Waterfront staff steering committee

2015 Budget Request (\$000s)	
Operating Budget*	
Gross	\$4,502
Revenues	(\$2,635)
Net	\$1,867
\$ increase from 2014	\$192
% increase from 2014	11.4%

Cost per household 2014	\$7.67
Cost per household 2015	\$8.46
% Change from 2014	10.3%

\*LAS & Waterfront Development  
- 100% Recovered from capital

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# Corporate Assets & Strategic Planning Energy, Fleet & Traffic

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## ENERGY, FLEET AND TRAFFIC ~ OVERVIEW

### Office of Energy Initiatives, Central Fleet and Traffic Operations & Engineering

#### Purpose / Function

- Energy services to ensure our City facilities, fleets and operations can operate;
- Energy services to reduce energy consumption, environmental emissions and manage costs;
- Fleet services to acquire, repair, maintain and dispose of vehicles & equipment required to provide municipal services.
- Fleet programs to ensure legislative compliance such as driver training and CVOR;
- Traffic services that ensure our community moves safely;
- Traffic services to ensure our roads are designed for the safety of all road users and pedestrians.

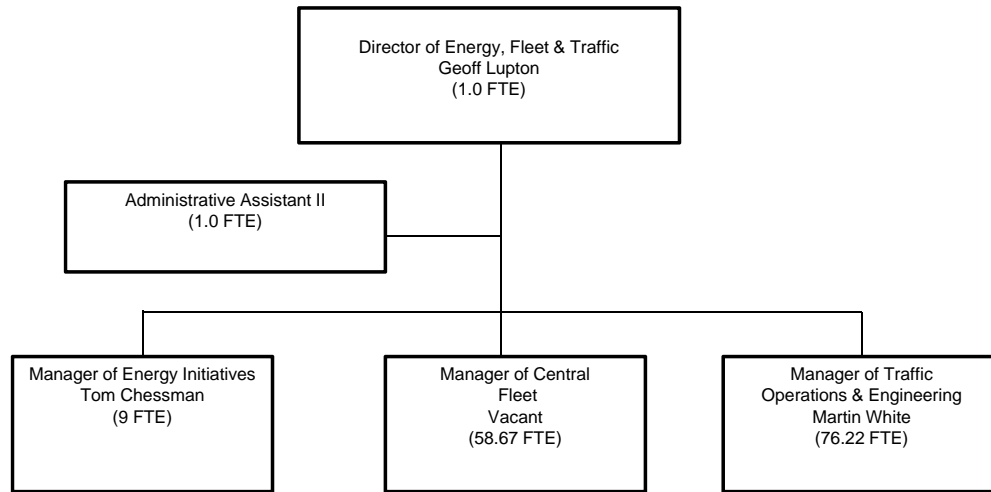


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**ENERGY, FLEET & TRAFFIC DIVISION**



Complement (FTE)	Management	Other	Total	Staff to Mgmt Ratio
2014	4.0	141.89	145.89	35.5:1
2015	4.0	141.89	145.89	35.5:1
Change	0.0	0.0	0.0	

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**2014 ACCOMPLISHMENTS**

**Energy, Fleet & Traffic**

- Energy savings/ avoided costs since 2006 will exceed \$38M by the end of 2014.
- Class A Electricity Rate savings of \$2.5M for year-end 2014.
- City’s “New” Corporate Energy Policy approved.
- Rebuilt 3 street sweepers avoiding \$300,000 impact to the Fleet Reserve.
- Multi-year purchase agreements for standard equipment in Central Fleet.
- Approval to build a new Compressed Natural Gas (CNG) station at Transit.
- Approval to sell the City’s District Cooling System for \$10.5M.
- Installation of Cannon Street Bike Lanes.
- Approval to reestablish the Hamilton Strategic Road Safety Program and Committee
- Construction on going for the Traffic Management Centre.
- Installation of over 50 new locations of pedestrian ladder crossings.
- Emergency Detour Route (EDR) completion on Red Hill and Linc.
- Red Light Camera Program, approved to install six new red light camera sites
- Completion of the Dennison Survey by EFT staff.

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**2015 KEY DELIVERABLES****Energy, Fleet & Traffic**

- Sale of the City's District Cooling Assets to Hamilton Community Energy
- Annual Green Energy Act and Energy Reporting
- Construction of the Compressed Natural Gas (CNG) station at Transit
- Energy efficiency retrofits funded through Energy Reserve
- Fuel site review and capital strategy
- CVOR Committee focus on improving the City's CVOR Safety Rating.
- Assist the Service Delivery Team on recommendations for Fleet Services
- Update the City's Green Fleet Plan
- Complete migration from Avantis Fleet Management Software to Hansen.
- Installation of the City's "NEW" Traffic Management Systems
- Enhance School Zone Speed and Flasher Program
- Review high incident traffic collision locations
- Pan Am directional and way finding signing
- Re-establish the Hamilton Strategic Road Safety Committee and Program
- Review Dennison Survey Results and Plan Developing for each section



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Hamilton 161

**ENERGY, FLEET & TRAFFIC DIVISION**

<b>2015 Budget Request (\$000s)</b>	
Operating Budget	
Gross	20,197
Revenues	(10,766)
Net	9,431
\$ increase from 2014	367
% increase from 2014	4.0%

Cost per household 2014	41.49
Cost per household 2015	42.74
% Change from 2014	3.0%



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Hamilton 162

**ENERGY - Office of Energy Initiatives****Services Provided & Key Facts**

Develop and manage energy conservation and demand management projects that reduce energy costs, consumption and environmental emissions which are major contributors to achieving the targeted reductions set out under the City Of Hamilton's "New" Corporate Energy Policy.

Provide corporate energy and commodity reporting, analysis, expertise and technical support. Monitor all Corporate Utility accounts for electricity, natural gas, water and fuel (exceeding \$45M annually). Manage the daily activities of:

- Hamilton Renewable Power Inc. (HRPI);
- BioGas Purification Plant;
- Daily Natural Gas and Fuel Procurement.



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Hamilton 163

**FLEET - Central Fleet****Services Provided & Key Facts**

Provides fleet services for 1,350 vehicles and equipment units through 10 City garages and numerous outside contractors. Services include:

- Core mission is to acquire, repair, maintain and dispose of vehicles & equipment required to provide municipal services.
- Delivery of programs to ensure legislative compliance. Driver Training, CVOR reduction
- Preparation of an annual vehicle replacement plan including specifications and bid tender documents for users.
- Conducts repairs on a diverse group of equipment from small grass and turf equipment to complex off road earth and asphalt machines and waste collection and road maintenance trucks.
- Provide enhanced vehicle technology and driver training to reduce fuel consumption and greenhouse gas emissions in accordance with Energy Policy.



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**TRAFFIC - Traffic Operations & Engineering**

**Services Provided & Key Facts**

Plans and delivers maintenance of tens of thousands of traffic and parking signs, 565 traffic signals, 6,500 lane km of pavement markings. Signal staff are on call 24/7 to respond to emergency signal failures.

- New Signal Installations & Signalized Intersection Modernizations
- Install and maintain all regulatory, warning and information signage
- Install Pavement Markings & Crosswalks
- Bike lane maintenance (signage/markings)
- Special Event & Tourism Destination Signage
- Hamilton Strategic Road Safety Program
- Implement Road Safety and Traffic Calming Improvements
- Traffic Management Centre
- Red Light Camera Program
- Truck routes and report to Truck Route Sub-committee



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**CORPORATE ASSETS & STRATEGIC PLANNING**

# Thank You



**TRANSPORTATION  
MANAGEMENT**

**FACILITIES  
MANAGEMENT &  
CAPITAL PROGRAMS**

**STRATEGIC  
PLANNING**

**ENERGY,  
FLEET &  
TRAFFIC**



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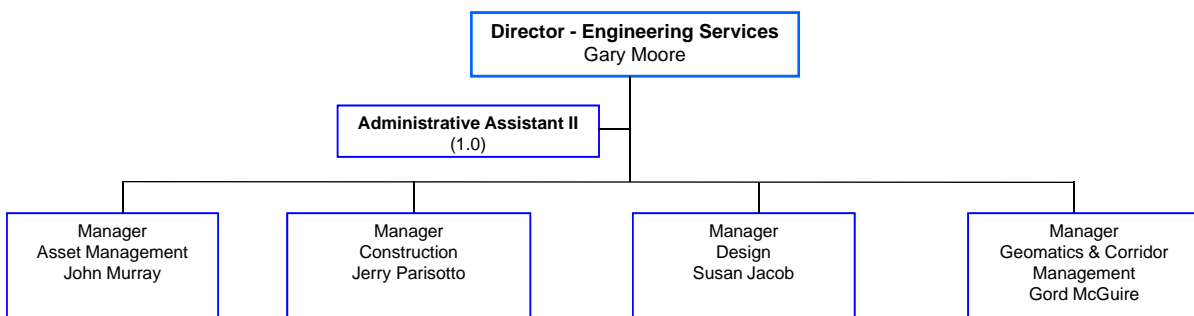
**DRAFT**

# Engineering Services

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**OVERVIEW**



Complement (FTE)	Management	Other	Total	Staff/Mgt Ratio
2014	5	108.33	113.33	21.67
2015	5	108.33	113.33	21.67
Change	0	0	0	

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**PROGRAM SPECIFIC INFORMATION**

**Asset Management – John Murray**

- inventory, needs analysis, scope budget control

**Design – Susan Jacob**

- detailed design and tendering preparation

**Construction Services – Jerry Parisotto**

- contract administration and resident site inspection

**Geomatics & Corridor Management – Gord McGuire**

- legal and engineering surveys and plans corridor control and street lighting



**2014 ROAD PROJECTS**



## 2014 SPECIAL PROJECTS



East Mountain Trail Loop



Mountain Transit Centre



Fesseden S.W.M. Pond



Pearl St. Pedestrian Bridge

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## ASSET MANAGEMENT

**Services Provided & Key Facts**

- Supports the balance of the Public Works Department through the development of strategic infrastructure programs, and the coordination of those programs, through the capital budget process
- Provides city wide condition assessment, life cycle analysis, risk assessment, prioritization of needs, and long term capital programming for Hamilton's entire right of way infrastructure networks, and assistance of the same processes for Facilities and Parks infrastructure
- City wide strategic communication of infrastructure issues through the State of the Infrastructure reports, the annual Asset Report Card, Asset Management Plans and other outlets.
- State of the Infrastructure (SotI) Public Engagement

**Accomplishments**

- Finalized Asset Management Plan (AMP) for ROW assets (provincial requirement)
- State of the Infrastructure – detailed update for Roads
- Implementation of new Facilities / Parks system (Ameresco)
- Initiated Bridge Heritage Master Plan Study
- Critical Water Main Inspection Program
- Sewer Main Lining Program is currently at a sustainable level of funding
- Upgraded Bridge Management Software

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**DESIGN****Services Provided & Key Facts**

- Design provides preliminary engineering to final detailed design services for the delivery of the Capital Program projects which include bridges, culverts, road, water and wastewater infrastructure
- Responsible for the coordination of acquisition of property or easements and the coordination of utility works during the design stage of capital projects
- Preparation of tender documents
- Obtain project approvals or permits
- Develop Standards and Specifications and lead New Products Committee
- Additional delivery of area rating projects
- Undertake Municipal Act Process for extension of Sanitary/Storm and watermains

**Accomplishments**

- Fessenden Flood Mitigation Project (Ph3- Forestgate/Daisy/Magnolia), Lower East End Drainage projects- Kenilworth: Barton to Burlington
- Centennial Parkway: King to Barton, Queenston Rd (Water/Wastewater Master Plan)
- Continue to lead Specifications and New Products Committee
- Large valve replacement program (3 locations)
- Other key projects (West 5<sup>th</sup>/Fennell /Burlington St /Mohawk Rd /James St N /Queensdale /Broker/Hwy 6 left turn land and MTC Park and Ride/Centre Rd)
- Pearl St. Pedestrian Bridge/ Centennial Parkway Railway Bridge

**CONSTRUCTION****Services Provided & Key Facts**

- The Construction Services section provides construction administration, inspection services and contract management for road, park, sewer, water, bridge and capital works construction projects throughout the City of Hamilton
- Responsible for overseeing and documenting the Contractor's performance with respect to the terms and conditions of the contract, including the quality control of materials and workmanship

**Accomplishments**

- Delivery of 50 projects worth 113 million dollars
- Variance report and assessment implementation



## GEOMATICS & CORRIDOR MANAGEMENT

### Services Provided & Key Facts

- Manage all utility permits, agreements, costing agreements and strategic directions
- Provide direction on development proposals with regards to access/egress and right of way impact
- Provide all engineering survey/legal survey services to support capital program and land acquisition
- Support all CAD and Document Management users in Public works and across the Corporation
- Deliver the Street lighting engineering design and program implementation
- Manage and issue all overweight, over dimension, road occupancy, road closure or use permits

### Accomplishments

- Initiated an application to the CRTC to develop a modern access agreement with Bell Canada
- Audited and created a street light data base – 44,000 records
- Published the Arc GIS On Line mapping tool for all ROW permits
- Installed over 1000 LED street lights
- Enhanced programming and fee implementation of the Road Occupancy Permit System
- Continued deployment of a Traffic Data Management system will be complete by end of 2014



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## 2014 ACCOMPLISHMENTS

### Road Cuts

- 2500 Road Cuts
- \$5 Million in restoration costs

### Road and Sidewalk kilometres

- 200 lane-kms of completed roads
- 57.8 kms of existing sidewalk replaced through ES Capital works
- 2.4 kms of new sidewalk constructed by ES / Development

### Watermain CIPP Lining

- 6,670 m

### Trunk Watermain Condition Assessment

- 12 km

### Sewer CIPP Lining

- 25.7 km ordered

### Sewer Lateral CIPP Lining

- 488 Laterals ordered

### Sewer Inspection and Condition Assessment

- 76.4 km Mainline
- 672 Laterals

City of Hamilton Corridor Activities Web App



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## 2014 KEY PROJECTS

**Right of Way (ROW) Reconstruction**

- Centennial Parkway - King to Barton / Queenston Rd
- West 5<sup>th</sup> St - Mohawk College (south Access) to Gateview / Fennell Ave
- West 5<sup>th</sup> St - StoneChurch to LINC / Blossom Ave
- Mohawk Rd – Upper Wellington to Upper Wentworth
- Queensdale Ave – Upper Wellington to Upper Wentworth
- James St N – Barton to Strachan
- Park St / York / Bond
- Hess St N
- Kilbourn / Southmeadow / Elm / Pine
- Helga / Imelda / Thomson courts
- Centre Rd - Carlisle to Woodend
- Forestgate / Daisy / Magnolia
- Alanson / Grant / Erie / Emerald / Blythe

**Right of Way (ROW) Resurfacing**

- Pan Am – Cannon St, Gage Ave and streets surrounding Pan Am Stadium
- Asset Preservation Neighbourhood Resurfacing (i.e. Glenview West, Delta West, Delta East, Bartonville, Stipeley and Stoney Creek neighbourhoods)
- Burlington St – MTO limit to Kenilworth Ave (westbound lower lanes)

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## EXTRAORDINARY BUDGET CHANGES- Tax Expenditures

Description	Amount (\$000's)
<b>Streetlighting Program</b>	
Hydro	575
Increase in Locate costs	255
Realignment from Capital to Operating	464

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## SUMMARY

**Services Provided & Key Facts**

Engineering Services is responsible for program development and delivery of all capital budget projects within the 3000 kilometres of right-of-way corridor within the City of Hamilton through:

**Asset Management**

- inventory, needs analysis, scope budget control

**Design**

- detailed design and tendering preparation

**Construction**

- contract administration and resident site inspection

**Geomatics and Corridor Management**

- legal and engineering surveys and plans corridor control
- street lighting

**2015 Budget Request (\$000s)**

Operating Budget	
Gross	22,774
Revenues	(\$15,484)
Net	7,290
\$ increase from 2014	1,294
% increase from 2014	21.6%

Cost per household 2014	\$27.44
Cost per household 2015	\$33.03
% increase from 2014	20.4%

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# Thank You

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