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

Mission and values

Strategic Priorities:
- #1 Healthy & Prosperous Community
- #2 Valued & Sustainable Services
- #3 Leadership & Governance

Strategic Objectives & Actions

Providing services that bring our City to life!


Influencing Factors: Aging infrastructure, energy costs, service levels, legislation, contracts, collective bargaining agreements, master plans, development and growth, weather and seasonal demands, emergency response, climate change, public expectations, Pan Am Games
Public Works Department 2015 Budget

OVERVIEW

GENERAL MANAGER
Gerry Davis
(1.0 FTE)

Administrative Coordinator
Pan Am Initiatives
Public Affairs Coordinator
(5.0 FTE)

Finance & Administration Staff
(44.0 FTE)

Human Resources Associates
(7.0 FTE)

CORPORATE ASSETS & STRATEGIC PLANNING
JOHN MATER
(308.64 fte)

ENGINEERING SERVICES
GARY MOORE
(113.33 fte)

ENVIRONMENTAL SERVICES
CRAIG MURDOCH
(332.90 fte)

OPERATIONS
BETTY MATTHEWS-MALONE
(423.75 fte)

TRANSPORTATION
DAVID DIXON
(657.04 fte)

HAMILTON WATER
DAN MCKINNON
(297.32 fte)

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
- 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
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
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
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
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
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
Leadership & Governance

- Staff succession planning
- Follow-up to the Denison Culture Assessments
- Implement Performance Accountability and Development tool
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
## 2015 GROSS EXPENDITURES – Tax Levy

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

¹ inclusive of fuel savings of $1,480,000
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount ($000's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter Season</td>
<td>1,897</td>
</tr>
<tr>
<td>Transit - DARTS Contract</td>
<td>760</td>
</tr>
<tr>
<td>Annualized Impact of 2014 approved Transit enhancement (PW14015)</td>
<td>747</td>
</tr>
<tr>
<td>Operations Contracts</td>
<td></td>
</tr>
<tr>
<td>- Waste Collection</td>
<td>930</td>
</tr>
<tr>
<td>- Waste Disposal</td>
<td>360</td>
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<tr>
<td>- Storm water maintenance</td>
<td>1,070</td>
</tr>
<tr>
<td>Transit Fleet Reserve Phase in Strategy (Year 5 of 8)</td>
<td>513</td>
</tr>
<tr>
<td>Streetlighting Program</td>
<td>1,294</td>
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<tr>
<td>Municipal Law Enforcement Illegal Dumping Project</td>
<td>200</td>
</tr>
<tr>
<td>Transit – McMaster Re-alignment</td>
<td>484</td>
</tr>
<tr>
<td>Building Repairs</td>
<td>1,175</td>
</tr>
<tr>
<td>Recoveries for Building Repairs</td>
<td>(960)</td>
</tr>
</tbody>
</table>
## 2015 GROSS REVENUES – Tax Levy

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

1 inclusive of additional Transit revenues from growth of $330,000
### EXTRAORDINARY BUDGET CHANGES - Tax Revenues

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount ($000's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased Court House Lease Revenues</td>
<td>1,535</td>
</tr>
<tr>
<td>Decreased Recycling Revenues</td>
<td>386</td>
</tr>
<tr>
<td>Decreased Transfer Station /Community Recycle Centre Revenues</td>
<td>174</td>
</tr>
<tr>
<td>Hamilton Renewable Power Inc. – final year of dividend reduction phase in</td>
<td>100</td>
</tr>
<tr>
<td>Tim Hortons Field</td>
<td>(839)</td>
</tr>
<tr>
<td>Increased Transit Revenues from ridership growth</td>
<td>(580)</td>
</tr>
</tbody>
</table>
### 2015 GROSS – NET DEPARTMENTAL BUDGET

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

Revised from Budget Book – includes $1.48m reduction in fuel and $330K increase in transit growth revenues
## Public Works Department

### 2015 NET OPERATING BUDGET BY DIVISION

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PW-General Administration</td>
<td>184,380</td>
<td>0</td>
<td>184,380</td>
<td>0</td>
</tr>
<tr>
<td>Corporate Assets &amp; Strategic Planning</td>
<td>15,548,070</td>
<td>15,804,590</td>
<td>17,962,130</td>
<td>2,414,060</td>
</tr>
<tr>
<td>Engineering Services</td>
<td>5,996,810</td>
<td>5,996,810</td>
<td>7,290,410</td>
<td>1,293,600</td>
</tr>
<tr>
<td>Environmental Services</td>
<td>32,203,790</td>
<td>32,511,640</td>
<td>32,593,270</td>
<td>389,480</td>
</tr>
<tr>
<td>Operations</td>
<td>92,863,410</td>
<td>104,286,860</td>
<td>98,730,130</td>
<td>5,866,720</td>
</tr>
<tr>
<td>Transit</td>
<td>54,355,840</td>
<td>54,324,920</td>
<td>56,336,930</td>
<td>1,981,090</td>
</tr>
<tr>
<td><strong>NET LEVY</strong></td>
<td><strong>201,152,300</strong></td>
<td><strong>212,924,810</strong></td>
<td><strong>213,097,250</strong></td>
<td><strong>11,944,940</strong></td>
</tr>
</tbody>
</table>

Includes adjustments for fuel ($1.48m) and transit growth revenues ($330K)
## 2015 GROSS - NET OPERATING BUDGET

<table>
<thead>
<tr>
<th></th>
<th>2014 Restated</th>
<th>2015 Base Budget ¹</th>
<th>$ Change</th>
<th>% Change</th>
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<td>($110,354,670)</td>
<td>($110,688,040)</td>
<td>($333,370)</td>
<td>(0.3%)</td>
</tr>
<tr>
<td><strong>NET LEVY</strong></td>
<td>$201,152,300</td>
<td>$213,097,250</td>
<td>$11,944,950</td>
<td>5.9%</td>
</tr>
</tbody>
</table>

¹ Inclusive of base budget savings
ASSET BASE GROWTH

### ASSET INVENTORY

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

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

Proposed Rapid Transit Corridors
## OVERVIEW

**Service, Operating & Capital**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Deficiencies</td>
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<tr>
<td>Standards</td>
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<tr>
<td>Growth</td>
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<tr>
<td>Modal Split</td>
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### SERVICE

<table>
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<tr>
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<tbody>
<tr>
<td>Hours (000's)</td>
<td>814</td>
<td>16</td>
<td>34</td>
<td>34</td>
<td>39</td>
<td>299</td>
<td>422</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Annual Operating (000's)</td>
<td>$88,000</td>
<td>$2,000</td>
<td>$4,000</td>
<td>$4,000</td>
<td>$4,500</td>
<td>$36,500</td>
<td>$51,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full Time Equivalents</td>
<td>644</td>
<td>16</td>
<td>34</td>
<td>26</td>
<td>30</td>
<td>230</td>
<td>336</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fleet</td>
<td>221</td>
<td>8</td>
<td>17</td>
<td>5</td>
<td>11</td>
<td>85</td>
<td>126</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fares</td>
<td>$2.00</td>
<td>$0.25</td>
<td>$0.10</td>
<td>$0.10</td>
<td>$0.10</td>
<td>TBD</td>
<td></td>
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</tbody>
</table>

### OPERATING

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Service Expenditures (000's)</td>
<td>$800</td>
<td>$3,500</td>
<td>$4,800</td>
<td>$4,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fare Revenues (000's)</td>
<td>-$1,910</td>
<td>-$3,770</td>
<td>-$3,120</td>
<td>-$3,230</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levy (000's)</td>
<td>-$1,110</td>
<td>-$270</td>
<td>$1,680</td>
<td>$1,270</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Change to Levy</td>
<td>-0.14%</td>
<td>-0.03%</td>
<td>0.21%</td>
<td>0.15%</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

### FUNDED CAPITAL (000's)

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Fleet (Local)</td>
<td>$8,700</td>
<td>$2,650</td>
<td>$2,030</td>
<td>$16,710</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

### UNFUNDED CAPITAL (000's)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Fleet (BLAST)</td>
<td>$6,875</td>
<td>$5,300</td>
<td>$5,420</td>
<td>$39,280</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance Storage Facility</td>
<td>$5,000</td>
<td>$10,000</td>
<td>$25,000</td>
<td>$80,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Experience</td>
<td>$4,000</td>
<td>$4,000</td>
<td>$4,000</td>
<td>$4,000</td>
<td>$23,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corridor Capacity</td>
<td>$200</td>
<td>$200</td>
<td>$200</td>
<td>$200</td>
<td>$5,200</td>
<td>$6,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$16,075</td>
<td>$14,200</td>
<td>$34,500</td>
<td>$89,620</td>
<td>$147,480</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$301,875</td>
</tr>
</tbody>
</table>

- **50% increase in service**
TEN YEAR LOCAL TRANSIT STRATEGY
Strategic Context

• 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

<table>
<thead>
<tr>
<th></th>
<th>2011 (Census)</th>
<th>2031*</th>
<th>2036*</th>
<th>2041*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (Persons)</td>
<td>519,950</td>
<td>660,000</td>
<td>730,000</td>
<td>780,000</td>
</tr>
<tr>
<td>Percentage Average Annual Change</td>
<td>1.3%</td>
<td>2.1%</td>
<td>1.4%</td>
<td></td>
</tr>
<tr>
<td>Employment (Jobs)</td>
<td>192,850**</td>
<td>300,000</td>
<td>330,000</td>
<td>350,000</td>
</tr>
<tr>
<td>Percentage Average Annual Change</td>
<td>2.8%</td>
<td>2.0%</td>
<td>1.2%</td>
<td></td>
</tr>
</tbody>
</table>

Source:
*Amendment No. 2 to the Growth Plan for the Greater Golden Horseshoe - City of Hamilton Comments
** 2011 National Household Survey
A Prosperous & Healthy Community

Transportation as an enabler for the community we strive to create, a healthy economy and a good quality of life.

STRATEGIC CONTEXT
Changing Role of Public Transportation

Public Transportation as an investment in a Vibrant and Sustainable City
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.
• 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 spilt 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.
The desired form of urban growth & transit are interdependent.
STRATEGIC CONTEXT
Transportation Master Plan

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

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated daily vehicle kilometres of Travel</td>
<td>4.8 Million KM</td>
<td>4.3 Million KM</td>
<td>n/a**</td>
<td>3.8 Million KM</td>
</tr>
<tr>
<td>Share of daily trips made by single-occupant drivers</td>
<td>68%</td>
<td>58%</td>
<td>67%</td>
<td>52%</td>
</tr>
<tr>
<td>Share of daily trips made by using municipal transit</td>
<td>5%</td>
<td>9%</td>
<td>7%</td>
<td>12%</td>
</tr>
<tr>
<td>Share of daily trips made by using walking or cycling</td>
<td>6%</td>
<td>10%</td>
<td>6%</td>
<td>15%</td>
</tr>
<tr>
<td>Annual transit rides per capita</td>
<td>48.5**</td>
<td>60</td>
<td>45.1**</td>
<td>80-100</td>
</tr>
</tbody>
</table>

*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.
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

- Trips per Capita
- Contribution per Capita
- Transit Benchmarking
- Synopsis
**MUNICIPAL INVESTMENT & BENCHMARKING**

**Trips per Capita (2013)**

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Trips per Capita</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006</td>
<td>2013</td>
</tr>
<tr>
<td>Brampton</td>
<td>24.48</td>
<td>35.43</td>
</tr>
<tr>
<td>Durham</td>
<td>13.83</td>
<td>19.46</td>
</tr>
<tr>
<td>London</td>
<td>54.12</td>
<td>63.07</td>
</tr>
<tr>
<td>York Region</td>
<td>18.00</td>
<td>21.51</td>
</tr>
<tr>
<td>Mississauga</td>
<td>41.22</td>
<td>47.59</td>
</tr>
<tr>
<td>Windsor</td>
<td>28.39</td>
<td>30.53</td>
</tr>
<tr>
<td>Hamilton</td>
<td>47.99</td>
<td>45.13</td>
</tr>
</tbody>
</table>

- City is trending in the wrong direction.
- 2013 Rapid Ready adoption.
### MUNICIPAL INVESTMENT & BENCHMARKING

#### Contribution per Capita (2013)

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Municipal Contribution per Capita</th>
<th>% Change</th>
<th>Average Increase per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006</td>
<td>2013</td>
<td></td>
</tr>
<tr>
<td>Brampton</td>
<td>47.73</td>
<td>84.20</td>
<td>76.41%</td>
</tr>
<tr>
<td>Durham</td>
<td>39.15</td>
<td>76.28</td>
<td>94.84%</td>
</tr>
<tr>
<td>Mississauga</td>
<td>53.06</td>
<td>87.59</td>
<td>65.08%</td>
</tr>
<tr>
<td>York Region</td>
<td>63.78</td>
<td>87.69</td>
<td>37.49%</td>
</tr>
<tr>
<td>London</td>
<td>44.63</td>
<td>58.50</td>
<td>31.08%</td>
</tr>
<tr>
<td>Windsor</td>
<td>48.02</td>
<td>60.71</td>
<td>26.43%</td>
</tr>
<tr>
<td>Hamilton</td>
<td>58.50</td>
<td>65.89</td>
<td>12.63%</td>
</tr>
</tbody>
</table>

- City has lowest contribution increase per year.
- 2013 Rapid Ready adoption.
Relatively efficient transit system.
• 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

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.

• 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)
Current System Deficiencies

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.

- **Analysis & Constraints**
- **Preliminary Assessment**
- **Challenges**
- **Proposed Service Changes**
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.
CURRENT SYSTEM DEFICIENCIES
Preliminary Assessment

<table>
<thead>
<tr>
<th>Group</th>
<th>BLAST Routes</th>
<th>Related Local Routes</th>
<th>Regional Connections</th>
<th>Trip Generators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B-Line</td>
<td>01 King</td>
<td>GO Hunter, GO Centennial, A-Line, L-Line, T-Line, S-Line</td>
<td>King/Main/Queenston Corridor, Eastgate Square, Stadium, University Plaza, McMaster Health Sciences, Downtown, McMaster University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>05 Delaware</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>51 University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>02 Barton</td>
<td>GO Hunter, GO James N, GO Centennial, A-Line, B-Line, L-Line, T-Line</td>
<td>The Centre on Barton, Downtown, Stadium, General Hospital</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27 Upper James</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>33 Sanatorium</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>35 College</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>51 University</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>25 Upper Wentworth</td>
<td>GO Hunter, B-Line, L-Line, T-Line, S-Line</td>
<td>Downtown, St. Joseph’s Hospital, Lime Ridge Mall</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26 Upper Wellington</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>T-Line</td>
<td>41 Mohawk</td>
<td>A-Line, B-Line</td>
<td>Mohawk Corridor, Industrial Area, The Centre on Barton, Lime Ridge Mall, Meadowlands</td>
</tr>
<tr>
<td></td>
<td></td>
<td>04 Bayfront</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>22 Upper Ottawa</td>
<td>GO Hunter, B-Line, L-Line, T-Line, S-Line</td>
<td>Downtown, St. Joseph’s Hospital, Juravinski Cancer Centre, Red Hill Business Park</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23 Upper Gage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group</th>
<th>Service FTE Ops</th>
<th>FTE Mtc</th>
<th>Flee t</th>
<th>Operating Cost</th>
<th>Capital Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLAST</td>
<td>20,000</td>
<td>17</td>
<td>3</td>
<td>$2,400,000</td>
<td>$6,875,000</td>
</tr>
<tr>
<td>Local</td>
<td>30,000</td>
<td>26</td>
<td>4</td>
<td>$3,600,000</td>
<td>$8,750,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>50,000</td>
<td>43</td>
<td>7</td>
<td>$6,000,000</td>
<td>$15,625,000</td>
</tr>
</tbody>
</table>

Service deficiency improvements can be a combination of:
Increased Frequency / Additional School Only Trips / Additional Running Time / Additional Layover / Route Restructuring
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.
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.
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.

- Current Transit Service Guidelines
- Summary of Proposed Service Standards
- Proposed Service Standards
- Gap Analysis Summary
- Frequency Gaps
- Proposed Service Changes
### APPLICATION OF SERVICE STANDARDS


<table>
<thead>
<tr>
<th>Service parameter</th>
<th>Monday to Saturday</th>
<th>Sunday &amp; Holiday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours of operation</td>
<td>6:00am to 12:00am</td>
<td>6:00am to 6:00pm</td>
</tr>
<tr>
<td>Maximum headway</td>
<td>30 minutes</td>
<td>60 minutes</td>
</tr>
<tr>
<td>Walking distance</td>
<td>400 metres for 90% of the population, where permitted by the local street network.</td>
<td></td>
</tr>
<tr>
<td>Revenue/cost ratio (R/C ratio)</td>
<td>• Greater than 50% for entire system</td>
<td>• Minimum 30% for individual routes, otherwise basic Monday to Friday rush hour only service to be provided every 30 minutes</td>
</tr>
</tbody>
</table>

- 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.
Coverage and Expansion of Service:
- Maintains 90% within 400m standard.
- Clarifies weekday peak service as a minimum.
- Includes workplaces as well as residents.

<table>
<thead>
<tr>
<th>Proposed HSR Service Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>System Wide Minimum</td>
</tr>
</tbody>
</table>
Service Span (Hours of Operation)

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

<table>
<thead>
<tr>
<th>Proposed HSR Service Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Span (Start of trip)</td>
</tr>
<tr>
<td>Weekday</td>
</tr>
<tr>
<td>Saturday</td>
</tr>
<tr>
<td>Sunday</td>
</tr>
<tr>
<td>Route Maximum</td>
</tr>
<tr>
<td>5:00 AM – 2:00 AM</td>
</tr>
<tr>
<td>5:00 AM – 2:00 AM</td>
</tr>
<tr>
<td>6:00 AM – 12:00 AM</td>
</tr>
</tbody>
</table>

Frequency

- Includes a minimum frequency for each service type.

<table>
<thead>
<tr>
<th>Proposed HSR Service Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency (Time between buses)</td>
</tr>
<tr>
<td>Route Minimum</td>
</tr>
<tr>
<td>30 / 30 / 60</td>
</tr>
<tr>
<td>30 / 30 / 60</td>
</tr>
<tr>
<td>30 / 30 / 60</td>
</tr>
</tbody>
</table>
Productivity

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

<table>
<thead>
<tr>
<th>Proposed HSR Service Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Productivity</strong> (Boardings per Service Hour)</td>
</tr>
<tr>
<td>Route Minimum</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Proposed HSR Service Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Loading</strong></td>
</tr>
<tr>
<td>(Expressed as Percentage of Seated Capacity)</td>
</tr>
<tr>
<td>Route Maximum</td>
</tr>
</tbody>
</table>
## APPLICATION OF SERVICE STANDARDS

### Proposed Transit Service Standards

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

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

<table>
<thead>
<tr>
<th>Group</th>
<th>Service Hours</th>
<th>FTE Ops</th>
<th>FTE Mtce</th>
<th>Fleet</th>
<th>Operating Cost</th>
<th>Capital Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>16,000</td>
<td>9</td>
<td>3</td>
<td>1</td>
<td>$1,100,000</td>
<td>$660,000</td>
</tr>
</tbody>
</table>
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.
TEN YEAR LOCAL TRANSIT STRATEGY
Network & Ridership Growth

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

… Requires government & customer investment.

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

- 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

<table>
<thead>
<tr>
<th></th>
<th>Vehicles</th>
<th>Capital Cost</th>
<th>Approx. Annual Operating Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Local</td>
<td>BLAST</td>
<td>Total</td>
</tr>
<tr>
<td>Accommodate Annual</td>
<td>30</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>Growth @ 2%</td>
<td></td>
<td></td>
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<tr>
<td>Ridership Growth</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>(modal shift)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Totals</td>
<td>30</td>
<td>70</td>
<td>100</td>
</tr>
</tbody>
</table>

- 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 …

- 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.

- Transit Technologies & Capacities
- Higher Order Transit
RAPID TRANSIT CORRIDORS NEEDED
Transit Technologies & Capacities

Mixed Traffic

Partially Exclusive Right-of-Way

Exclusive Right-of-Way

Subway (Max. subway capacity 36,000)

Advanced Light Rail

LRT

Streetcar

Bus

BRT

Peak Direction, Peak Hour, Passengers per Hour

HSR King / Main / Queenston Corridor = 1,100 Passengers per Peak Hour
RAPID TRANSIT CORRIDORS NEEDED
Higher Order Transit

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

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<tbody>
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<td>LOCAL SERVICE</td>
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<tr>
<td></td>
<td>Deficiencies</td>
<td>Stds</td>
<td>Growth</td>
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<tr>
<td>BLAST - Express Bus</td>
<td>Deficiencies</td>
<td>Growth</td>
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<tr>
<td>BLAST - Higher Order</td>
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</tbody>
</table>

• Begin to Shift Modal Split with Higher Order Transit.

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<tbody>
<tr>
<td>LOCAL SERVICE</td>
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<td>Deficiencies</td>
<td>Stds</td>
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<tr>
<td>BLAST - Express Bus</td>
<td>Deficiencies</td>
<td>Growth</td>
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<td>BLAST - Higher Order</td>
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</tbody>
</table>
**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**
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.
Fare Elasticity Service Elasticity

1% increase in fares = 0.2% to 0.5% decrease in ridership
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.
FARE POLICY
4 Year Revenue & Ridership Impact of Fares & Service Increases

4 YEAR FARE & SERVICE IMPACT

- Net Ridership
- Revenue

[Graph showing revenue and ridership impact over time]
**FARE POLICY**

**Historical Fare Increases**

<table>
<thead>
<tr>
<th></th>
<th>Cash</th>
<th>Ticket</th>
<th>Monthly Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adult</td>
<td>Adult</td>
<td>Student</td>
</tr>
<tr>
<td>Jan-04</td>
<td>$ 2.10</td>
<td>$ 1.70</td>
<td>$ 1.35</td>
</tr>
<tr>
<td>Jun-07</td>
<td>$ 2.25</td>
<td>$ 1.75</td>
<td>$ 1.45</td>
</tr>
<tr>
<td>Jan-08</td>
<td>$ 2.40</td>
<td>$ 1.85</td>
<td>$ 1.55</td>
</tr>
<tr>
<td>Jan-10</td>
<td>$ 2.55</td>
<td>$ 2.00</td>
<td>$ 1.65</td>
</tr>
<tr>
<td>Jan-14</td>
<td>$ 2.55</td>
<td>$ 2.00</td>
<td>$ 1.65</td>
</tr>
</tbody>
</table>

- No fare increase since 2010.
FARE POLICY

Transit Fare Comparison (2014)

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Cash</th>
<th>Ticket</th>
<th>Monthly Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adult</td>
<td>Adult</td>
<td>Adult</td>
</tr>
<tr>
<td>London</td>
<td>$2.75</td>
<td>$1.90</td>
<td>$1.54</td>
</tr>
<tr>
<td>Hamilton</td>
<td>$2.55</td>
<td>$2.00</td>
<td>$1.65</td>
</tr>
<tr>
<td>Windsor</td>
<td>$2.75</td>
<td>$2.30</td>
<td>$1.80</td>
</tr>
<tr>
<td>Brampton</td>
<td>$3.75</td>
<td>$2.80</td>
<td>$2.50</td>
</tr>
<tr>
<td>Mississauga</td>
<td>$3.25</td>
<td>$2.80</td>
<td>$2.25</td>
</tr>
<tr>
<td>Durham</td>
<td>$3.00</td>
<td>$2.85</td>
<td>$2.64</td>
</tr>
<tr>
<td>York</td>
<td>$4.00</td>
<td>$3.30</td>
<td>$2.50</td>
</tr>
<tr>
<td>Average</td>
<td>$3.15</td>
<td>$2.56</td>
<td>$2.13</td>
</tr>
</tbody>
</table>

- Significantly lower fares than peers.
### FARE POLICY

#### Fare Structure Comparison

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Cash Premium</th>
<th>Ticket Concession</th>
<th>Monthly Pass Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adult</td>
<td>Adult</td>
<td>Student</td>
</tr>
<tr>
<td>London</td>
<td>45%</td>
<td>Base</td>
<td>81%</td>
</tr>
<tr>
<td>Hamilton</td>
<td>28%</td>
<td>Base</td>
<td>83%</td>
</tr>
<tr>
<td>Windsor</td>
<td>20%</td>
<td>Base</td>
<td>78%</td>
</tr>
<tr>
<td>Brampton</td>
<td>34%</td>
<td>Base</td>
<td>89%</td>
</tr>
<tr>
<td>Mississauga</td>
<td>16%</td>
<td>Base</td>
<td>80%</td>
</tr>
<tr>
<td>Durham</td>
<td>5%</td>
<td>Base</td>
<td>93%</td>
</tr>
<tr>
<td>York</td>
<td>21%</td>
<td>Base</td>
<td>76%</td>
</tr>
<tr>
<td>Average</td>
<td>23%</td>
<td>Base</td>
<td>83%</td>
</tr>
</tbody>
</table>

- Similar structure to peers with the exception of Senior passes.
- Should address senior monthly pass multiplier.
FARE POLICY
Proposed Multi-year Fare Increases

- 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.

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash</th>
<th>Ticket</th>
<th>Monthly Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adult</td>
<td>Student</td>
<td>Adult</td>
</tr>
<tr>
<td></td>
<td>$2.55</td>
<td>$2.00</td>
<td>$1.65</td>
</tr>
<tr>
<td>Sep-15</td>
<td>$3.00</td>
<td>$2.25</td>
<td>$1.70</td>
</tr>
<tr>
<td>Sep-16</td>
<td>$3.00</td>
<td>$2.35</td>
<td>$1.75</td>
</tr>
<tr>
<td>Sep-17</td>
<td>$3.25</td>
<td>$2.45</td>
<td>$1.85</td>
</tr>
<tr>
<td>Sep-18</td>
<td>$3.25</td>
<td>$2.55</td>
<td>$1.90</td>
</tr>
</tbody>
</table>

Cash Utilization
- 2015: $87.00
- 2016: $103.40
- 2017: $107.80
- 2018: $112.20
FARE POLICY
Annual Impact of Fares & Service Increases

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Ridership</th>
<th>Net Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>7,991</td>
<td>$1,907,874</td>
</tr>
<tr>
<td>2016</td>
<td>158,324</td>
<td>$3,770,444</td>
</tr>
<tr>
<td>2017</td>
<td>479,752</td>
<td>$3,117,922</td>
</tr>
<tr>
<td>2017</td>
<td>551,280</td>
<td>$3,230,926</td>
</tr>
</tbody>
</table>
TEN YEAR LOCAL TRANSIT STRATEGY
Multi-year Financial Summary

- Service, Operating & Capital
## Multi-Year Financial Summary
### Service, Operating & Capital

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Deficiencies</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hours (000's)</strong></td>
<td>814</td>
<td>16</td>
<td>34</td>
<td>34</td>
<td>39</td>
<td>299</td>
<td>422</td>
<td></td>
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<tr>
<td><strong>Annual Operating (000's)</strong></td>
<td>$88,000</td>
<td>$2,000</td>
<td>$4,000</td>
<td>$4,000</td>
<td>$4,500</td>
<td>$36,500</td>
<td>$51,000</td>
<td></td>
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<tr>
<td><strong>Full Time Equivalents</strong></td>
<td>644</td>
<td>16</td>
<td>34</td>
<td>26</td>
<td>30</td>
<td>230</td>
<td>336</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Fleet</strong></td>
<td>221</td>
<td>8</td>
<td>17</td>
<td>5</td>
<td>11</td>
<td>85</td>
<td>126</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Fares</strong></td>
<td>$2.00</td>
<td>$0.25</td>
<td>$0.10</td>
<td>$0.10</td>
<td>$0.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Service Expenditures (000's)</strong></td>
<td></td>
<td>$800</td>
<td>$3,500</td>
<td>$4,800</td>
<td>$4,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Fare Revenues (000's)</strong></td>
<td></td>
<td>-$1,910</td>
<td>-$3,770</td>
<td>-$3,120</td>
<td>-$3,230</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Levy (000's)</strong></td>
<td></td>
<td>-$1,110</td>
<td>-$270</td>
<td>$1,680</td>
<td>$1,270</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Annual Change to Levy</strong></td>
<td></td>
<td>-0.14%</td>
<td>-0.03%</td>
<td>-0.21%</td>
<td>0.15%</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

### Funded Capital (000's)

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fleet (Local)</strong></td>
<td>$8,700</td>
<td>$2,650</td>
<td>$2,030</td>
<td></td>
<td>$16,710</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>UNFUNDED CAPITAL (000's)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Fleet (BLAST)</strong></td>
<td>$6,875</td>
<td>$5,300</td>
<td>$5,420</td>
<td></td>
<td>$39,280</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maintenance Storage Facility</strong></td>
<td>$5,000</td>
<td>$10,000</td>
<td>$25,000</td>
<td>$80,000</td>
<td>$80,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Customer Experience</strong></td>
<td>$4,000</td>
<td>$4,000</td>
<td>$4,000</td>
<td>$4,000</td>
<td>$23,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Corridor Capacity</strong></td>
<td>$200</td>
<td>$200</td>
<td>$200</td>
<td>$200</td>
<td>$5,200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$16,075</td>
<td>$14,200</td>
<td>$34,500</td>
<td>$89,620</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

### Summary
- **50% increase in service**
TEN YEAR LOCAL TRANSIT STRATEGY
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.
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.
TRANSIT PROGRAMS

Use PRESTO on HSR and Save!

Get a PRESTO card, ride the HSR and start saving with our frequent rider program. Take 11 rides and then it's free for the rest of the week! Plus, you always pay the lowest fare.

Hamilton Public Works ~ Providing services that bring our City to life!
Public Works Department – Transit Division

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 rollerblade.

Services Provided

<table>
<thead>
<tr>
<th>Services Provided</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Transit</td>
<td></td>
</tr>
<tr>
<td>Specialized Transit</td>
<td></td>
</tr>
<tr>
<td>Rapid Transit</td>
<td></td>
</tr>
</tbody>
</table>

OPERATIONS DIVISION ($000)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 NET RESTATED BUDGET</td>
<td>54,355,840</td>
</tr>
<tr>
<td>2015 NET REQUESTED BUDGET</td>
<td>56,336,930</td>
</tr>
<tr>
<td>2015 NET CHANGE</td>
<td>1,981,090</td>
</tr>
<tr>
<td>2015 FTE</td>
<td>657.04</td>
</tr>
</tbody>
</table>
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)
Public Works Department – Transit Division

2015 Budget

OVERVIEW

DIRECTOR
David Dixon
(1.0 FTE)

Transit Application Sr. Project Manager (3.0 FTE)

Administrative Assistant II
(1.0 FTE)

Manager
Accessible Transit Services
George Brovac
(13.0 FTE)

Manager
Transit Operations
Murray Hill
(467.3 FTE)

Manager
Transit Fleet Maintenance
Douglas H. Murray
(114.57 FTE)

Manager
Transit Planning & Customer Service
Jim Dahms
(19.84 FTE)

Manager
Transit Support Services
Nancy Purser
(16.0 FTE)

Manager
Mobility Programs & Special Projects
Christine Lee-Morrison
(6.33 FTE)

<table>
<thead>
<tr>
<th>Complement (FTE)</th>
<th>Management</th>
<th>Other</th>
<th>Total</th>
<th>Staff/Mgt Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>7.00</td>
<td>647.04</td>
<td>654.04</td>
<td>92.43:1</td>
</tr>
<tr>
<td>2015</td>
<td>7.00</td>
<td>650.04</td>
<td>657.04</td>
<td>92.86:1</td>
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<tr>
<td>Change</td>
<td>0.00</td>
<td>3.00</td>
<td>3.00</td>
<td></td>
</tr>
</tbody>
</table>

Hamilton Public Works ~ Providing services that bring our City to life!
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
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

<table>
<thead>
<tr>
<th>2015 Budget Request ($000's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Budget</td>
</tr>
<tr>
<td>Gross</td>
</tr>
<tr>
<td>Revenues</td>
</tr>
<tr>
<td>Net</td>
</tr>
</tbody>
</table>

$ increase from 2014 1,981
% increase from 2014 3.6%

| 2014 Budget R/C Ratio       | 45.30% |
| 2015 Budget R/C Ratio       | 44.58% |
## 2015 MAJOR COST DRIVERS FOR DIVISION

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

<table>
<thead>
<tr>
<th>Roads Operations</th>
<th>Storm Water Facilities</th>
<th>Business Programs</th>
<th>Waste Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Roadway &amp;</td>
<td>• Operation</td>
<td>• Customer Service and Education</td>
<td>• Waste Collection</td>
</tr>
<tr>
<td>Sidewalk</td>
<td>• Maintenance</td>
<td>• Data Management</td>
<td>• Downtown, BIA &amp; Alleyway Cleanliness</td>
</tr>
<tr>
<td>Infrastructure Maintenance</td>
<td></td>
<td>• Operational Efficiencies &amp; Performance</td>
<td>• Recycling &amp; Waste Disposal</td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
<td></td>
<td>• Contaminated Sites Management</td>
</tr>
<tr>
<td>Capital</td>
<td></td>
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</tr>
<tr>
<td>Rehabilitation</td>
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</table>

OPERATIONS DIVISION ($000)

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<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>2014 NET RESTATED BUDGET</td>
<td>92,863</td>
</tr>
<tr>
<td>2015 NET REQUESTED BUDGET</td>
<td>98,730</td>
</tr>
<tr>
<td>2015 NET CHANGE</td>
<td>5,867</td>
</tr>
<tr>
<td>2015 FTE</td>
<td>423.75</td>
</tr>
</tbody>
</table>
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
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
Public Works – Operations Division

OVERVIEW

DIRECTOR
OPERATIONS
Betty Matthews-Malone

Senior Project Manager
R. Morello
(1.0 FTE)

Administrative Assistant I
(1.0 FTE)

Manager
Roads & Maintenance
Darrell Smith
(134.60 FTE)

Manager
Winter Control
Bob Paul
(125.77 FTE)

Manager
Capital Rehabilitation & Technical Operations
Brian Hughes
(13.68 FTE)

Manager
Waste Collection
Colin Vidler
(89.79 FTE)

Manager
Recycling & Waste Disposal
Emil Prpic
(16 FTE)

Manager
Business Programs
Angela Storey
(40.91 FTE)

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount ($000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Waste Collection Contracts (increased service requests)</strong></td>
<td></td>
</tr>
<tr>
<td>- Escalation</td>
<td>545</td>
</tr>
<tr>
<td>- Growth</td>
<td>385</td>
</tr>
<tr>
<td><strong>Waste Disposal Contracts</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Municipal Law Enforcement Illegal Dumping Project cost allocation</strong></td>
<td></td>
</tr>
<tr>
<td>(PED11127f/PW11051g)</td>
<td></td>
</tr>
<tr>
<td><strong>Storm water Management</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Winter Season</strong></td>
<td></td>
</tr>
<tr>
<td>- Winter Control</td>
<td></td>
</tr>
<tr>
<td>- Winter Maintenance</td>
<td></td>
</tr>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
</tr>
<tr>
<td>- Recycling Revenues</td>
<td></td>
</tr>
<tr>
<td>- TS/CRC Revenues</td>
<td></td>
</tr>
<tr>
<td>- Reduction in HRPI recoveries and dividends revenue</td>
<td></td>
</tr>
</tbody>
</table>

- Total: 930
- Total: 360
- Total: 200
- Total: 1,070
- Total: 1,721
- Total: 176
- Total: 386
- Total: 174
- Total: 100
ROADS
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….
Public Works – Service Profile

2015 Budget

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

<table>
<thead>
<tr>
<th>2015 Budget Request ($000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Budget</td>
</tr>
<tr>
<td>Gross</td>
</tr>
<tr>
<td>Revenues</td>
</tr>
<tr>
<td>Net</td>
</tr>
<tr>
<td>$ increase from 2014</td>
</tr>
<tr>
<td>% increase from 2014</td>
</tr>
</tbody>
</table>

Cost per household 2014  247.61

Cost per household 2015  259.22

% Change from 2014  4.7%
## Winter Control Program Approved Service Levels

### Winter Control Level of Service Standards

<table>
<thead>
<tr>
<th>Road Classification</th>
<th>Surface Condition</th>
<th>Snow Accumulation</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Target Response</td>
<td>Completion Time</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td><strong>Priority</strong></td>
<td><strong>Response Time</strong></td>
<td><strong>Time</strong></td>
</tr>
<tr>
<td>Linc/Arterials</td>
<td>1</td>
<td>Immediate</td>
<td>2.5 cm</td>
</tr>
<tr>
<td>Escarpment Crossings</td>
<td>1</td>
<td>Immediate</td>
<td>5 cm</td>
</tr>
<tr>
<td>Primary Collectors</td>
<td>2A</td>
<td>4 hrs</td>
<td>8 cm</td>
</tr>
<tr>
<td>e.g. Whitney Ave</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Collectors</td>
<td>2B</td>
<td>Centre Bare</td>
<td>4 hrs</td>
</tr>
<tr>
<td>e.g. Fletcher Rd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural Roads Hard</td>
<td>3</td>
<td>Centre Bare</td>
<td>8 hrs</td>
</tr>
<tr>
<td>Surface</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e.g. Golf Club Rd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>3R</td>
<td>Bare</td>
<td>8 hrs</td>
</tr>
<tr>
<td>e.g. Ravina Cres</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loose-top Rural</td>
<td>3</td>
<td>Snow Packed</td>
<td>12 hrs</td>
</tr>
<tr>
<td>Roads</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e.g. Trimble Rd</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Operating Budget History

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

*EXCLUDES RESERVE CONTRIBUTIONS

** Estimated at January 6, 2015
WASTE COLLECTIONS
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
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)

<table>
<thead>
<tr>
<th>Operating Budget</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross</td>
<td>29,927</td>
</tr>
<tr>
<td>Revenues</td>
<td>(57)</td>
</tr>
<tr>
<td>Net</td>
<td>29,870</td>
</tr>
</tbody>
</table>

$ 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%
RECYCLING AND WASTE DISPOSAL
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)

<table>
<thead>
<tr>
<th>Operating Budget</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross</td>
<td>20,991</td>
</tr>
<tr>
<td>Revenues</td>
<td>(13,501)</td>
</tr>
<tr>
<td>Net</td>
<td>7,490</td>
</tr>
<tr>
<td>$ increase from 2014</td>
<td>1,077</td>
</tr>
<tr>
<td>% increase from 2014</td>
<td>16.8%</td>
</tr>
</tbody>
</table>

| Cost per household 2014 | 29.35 |
| Cost per household 2015 | 33.94 |
| % Change from 2014     | 15.6% |
RECYCLING PROGRAM REVENUES

($ Million (000))

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
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<tr>
<td>2009</td>
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<td>2010</td>
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<td>2011</td>
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<td>2012</td>
<td></td>
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<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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
Public Works – Service Profile

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)

<table>
<thead>
<tr>
<th>Operating Budget*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross</td>
</tr>
<tr>
<td>Revenues</td>
</tr>
<tr>
<td>Net</td>
</tr>
<tr>
<td>$ increase from 2014</td>
</tr>
<tr>
<td>% increase from 2014</td>
</tr>
</tbody>
</table>

Cost per household 2014 18.04
Cost per household 2015 18.88
% Change from 2014 4.7%
Thank You
Environmental Services Division
OVERVIEW OF SERVICES
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.

<table>
<thead>
<tr>
<th>Services Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry</td>
</tr>
<tr>
<td>Horticulture</td>
</tr>
<tr>
<td>Parks Maintenance</td>
</tr>
<tr>
<td>Cemeteries</td>
</tr>
</tbody>
</table>

ENVIRONMENTAL SERVICES ($000)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 NET BUDGET</td>
<td>32,204</td>
</tr>
<tr>
<td>2015 NET REQUESTED BUDGET</td>
<td>32,594</td>
</tr>
<tr>
<td>2015 NET CHANGE</td>
<td>390</td>
</tr>
<tr>
<td>2015 FTE</td>
<td>332.89</td>
</tr>
</tbody>
</table>
Public Works – Environmental Services Division

OVERVIEW

Director
Craig Murdoch

Administrative Assistant II
(1.0 FTE)

Manager
Forestry & Horticulture
Steve Barnhart
(95.68 FTE)

Manager
Parks & Cemeteries
Tennessee Propedo
(235.21 FTE)

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
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
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
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)

<table>
<thead>
<tr>
<th>Operating Budget</th>
<th>Gross 9,571</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>(1,895)</td>
</tr>
<tr>
<td>Net</td>
<td>7,676</td>
</tr>
</tbody>
</table>

- $ 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%
**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)**

<table>
<thead>
<tr>
<th>Operating Budget</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross</td>
<td>3,644</td>
</tr>
<tr>
<td>Revenues</td>
<td>(141)</td>
</tr>
<tr>
<td>Net</td>
<td>3,503</td>
</tr>
</tbody>
</table>

$ increase from 2014 14

% increase from 2014 0.4%

<table>
<thead>
<tr>
<th>Cost per household 2014</th>
<th>15.97</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per household 2015</td>
<td>15.87</td>
</tr>
<tr>
<td>% Change from 2014</td>
<td>(0.6%)</td>
</tr>
</tbody>
</table>
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)
Public Works – Environmental Services Division

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 pickup
- Playing field maintenance
- General Grounds and Trails Maintenance (over 65 km of trails)
- Special Event Support
- Seasonal displays
- Customer Service

2015 Budget Request ($000s)

<table>
<thead>
<tr>
<th></th>
<th>Operating Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross</td>
<td>19,231</td>
</tr>
<tr>
<td>Revenues</td>
<td>(241)</td>
</tr>
<tr>
<td>Net</td>
<td>18,990</td>
</tr>
<tr>
<td>$ increase from 2014</td>
<td>191</td>
</tr>
<tr>
<td>% increase from 2014</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>2015 Budget Request ($000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Budget</td>
</tr>
<tr>
<td>Gross</td>
</tr>
<tr>
<td>Revenues</td>
</tr>
<tr>
<td>Net</td>
</tr>
<tr>
<td>$ increase from 2014</td>
</tr>
<tr>
<td>% increase from 2014</td>
</tr>
</tbody>
</table>

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per household 2014</td>
</tr>
<tr>
<td>Cost per household 2015</td>
</tr>
<tr>
<td>% Change from 2014</td>
</tr>
</tbody>
</table>
Thank You
Corporate Assets & Strategic Planning
Public Works – Corporate Assets & Strategic Planning

OVERVIEW

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRECTOR</td>
<td>John Mater</td>
<td>1.0</td>
</tr>
<tr>
<td>Administrative Assistant I</td>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td>MANAGER</td>
<td>Transportation Management</td>
<td>9.0</td>
</tr>
<tr>
<td>DIRECTOR</td>
<td>Energy, Fleet &amp; Traffic</td>
<td>145.89</td>
</tr>
<tr>
<td>DIRECTOR</td>
<td>Strategic Planning</td>
<td>23.34</td>
</tr>
<tr>
<td>DIRECTOR</td>
<td>Facilities Management &amp; Capital Programs</td>
<td>128.41</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Complement (FTE)</th>
<th>Management</th>
<th>Other</th>
<th>Total</th>
<th>Staff to Mgt Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>13</td>
<td>295.64</td>
<td>308.64</td>
<td>22.74:1</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>13</td>
<td>295.64</td>
<td>308.64</td>
<td>22.74:1</td>
<td></td>
</tr>
<tr>
<td>Change</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>22.74:1</td>
<td></td>
</tr>
</tbody>
</table>

Hamilton Public Works ~ Providing services that bring our City to life!
Public Works – Corporate Assets & Strategic Planning

2015 Budget

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
### MAJOR COST DRIVERS

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (000’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Court House Lease</td>
<td>1,535</td>
</tr>
<tr>
<td>Facilities Contractual Services (Snow Removal; Building Cleaning, majority of this is recovered)</td>
<td>480</td>
</tr>
<tr>
<td>Facilities Building Repairs – increased to reflect historical actuals, majority of this is recovered</td>
<td>1,100</td>
</tr>
<tr>
<td>Facility Recoveries from User Groups</td>
<td>(1,118)</td>
</tr>
<tr>
<td>Contractual (Confederation Park)</td>
<td>209</td>
</tr>
</tbody>
</table>
TRANSPORTATION MANAGEMENT

Proposed Traffic Concept Plan

Hamilton Public Works ~ Providing services that bring our City to life!
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.
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)

<table>
<thead>
<tr>
<th>Operating Budget</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross</td>
<td>1,260</td>
</tr>
<tr>
<td>Revenues</td>
<td>(1,176)</td>
</tr>
<tr>
<td>Net</td>
<td>84</td>
</tr>
<tr>
<td>$ increase from 2014</td>
<td>0</td>
</tr>
<tr>
<td>% increase from 2014</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2014 Cost per Household</th>
<th>$0.39</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 Cost per Household</td>
<td>$0.38</td>
</tr>
</tbody>
</table>
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**
  - Copps 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)
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

<table>
<thead>
<tr>
<th>1) Communication</th>
<th>7) Operations and Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2) Emergency Preparedness and Business Continuity</td>
<td>8) Project Management</td>
</tr>
<tr>
<td>3) Environmental Stewardship and Sustainability</td>
<td>9) Quality Management Program</td>
</tr>
<tr>
<td>4) Finance and Business</td>
<td>10) Real Estate And Property Management</td>
</tr>
<tr>
<td>5) Human Factors</td>
<td>11) Technology</td>
</tr>
<tr>
<td>6) Leadership and Strategy</td>
<td></td>
</tr>
</tbody>
</table>

* IFMA ~ International Facility Management Association"
FACILITIES MANAGEMENT & CAPITAL PROGRAMS

Director of Facilities Management & Capital Programs
Rom D’Angelo (1.0 FTE)

Adminstrative Assistant II (1.0 FTE)

Manager of Facilities Operations & Technical Services (Corporate)
Chuck Alkerton (27.3 FTE)

Manager of Facilities Operations & Technical Services (Community)
Robyn Ellis (temporary)(19.0 FTE)

Manager of Strategic Planning, Capital & Compliance
Marnie Cluckie (16.3 FTE)

Superintendent, Business Services and Technology
Delfina Duarte (9.3 FTE)

Manager of Sport and Entertainment
Rob Gatto (54.51 FTE)

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 | ---
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
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)
Public Works – Corporate Assets & Strategic Planning

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 3rd Party Operators

2015 Budget Request ($000s)

<table>
<thead>
<tr>
<th>Operating Budget</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Gross</td>
<td>$17,528</td>
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<tr>
<td>Revenues</td>
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<tr>
<td>Net</td>
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<tr>
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<tr>
<td>% increase from 2014</td>
<td>39.3%</td>
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</table>

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
OVERVIEW OF SERVICES ~ STRATEGIC PLANNING

Landscape Architectural Services
- Chappel Park

Policy & Programs
- Confederation Park

Waterfront Development
- Cootes to Escarpment EcoPark System
- Piers 7 & 8 Concept
- Harbour West Marina

Hamilton Public Works ~ Providing services that bring our City to life!
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.
OVERVIEW

DIRECTOR
Rob Norman
(1.0 FTE)

Administrative Assistant II
(1.0 FTE)

Manager
Landscape Architecture Services
Le'Ann Seely
(11.34 FTE)

Manager
Policy & Programs
Peter Wobschall (Acting)
(7.0 FTE)

Manager
Waterfront Development
Gavin Norman
(3.0 FTE)

<table>
<thead>
<tr>
<th>Complement (FTE)</th>
<th>Management</th>
<th>Other</th>
<th>Total</th>
<th>Staff to Mgt Ratio</th>
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</thead>
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<tr>
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<td>4.0</td>
<td>19.34</td>
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<tr>
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<td>19.34</td>
<td>23.34</td>
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<td>Change</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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</tr>
</tbody>
</table>
2014 Accomplishments

Gore Pedestrianization Initiative - Ph. 1 Veterans’ Place

Binbrook Fairgrounds Community Park Skate Park

Crown Point East Park

Gage Park

Fountain Terraces

Confederation Park Phase 1 Trail Development

Hamilton Public Works ~ Providing services that bring our City to life!
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
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
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
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
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
Public Works – Corporate Assets & Strategic Planning

2015 Budget

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)

<table>
<thead>
<tr>
<th>Operating Budget*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross</td>
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<td>Revenues</td>
<td>($2,635)</td>
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<tr>
<td>Net</td>
<td>$1,867</td>
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</table>

$ 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
Corporate Assets & Strategic Planning
Energy, Fleet & Traffic
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.
Public Works – Corporate Assets & Strategic Planning

ENERGY, FLEET & TRAFFIC DIVISION

Director of Energy, Fleet & Traffic
Geoff Lupton
(1.0 FTE)

Administrative Assistant II
(1.0 FTE)

Manager of Energy Initiatives
Tom Chessman
(9 FTE)

Manager of Central Fleet
Vacant
(58.67 FTE)

Manager of Traffic Operations & Engineering
Martin White
(76.22 FTE)

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 |
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.
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
### 2015 Budget Request ($000s)

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Operating Budget</td>
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<tr>
<td>Gross</td>
<td>$20,197</td>
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<tr>
<td>Revenues</td>
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<tr>
<td>Net</td>
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<td>$367</td>
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<tr>
<td>% increase from 2014</td>
<td>4.0%</td>
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</table>

- **Cost per household 2014**: $41.49
- **Cost per household 2015**: $42.74
- **% Change from 2014**: 3.0%
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.
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.
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
Thank You
Engineering Services
Public Works – Engineering Services

OVERVIEW

Director - Engineering Services
Gary Moore

Administrative Assistant II
(1.0)

Manager
Asset Management
John Murray

Manager
Construction
Jerry Parisotto

Manager
Design
Susan Jacob

Manager
Geomatics & Corridor Management
Gord McGuire

<table>
<thead>
<tr>
<th>Complement (FTE)</th>
<th>Management</th>
<th>Other</th>
<th>Total</th>
<th>Staff/Mgt Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>5</td>
<td>108.33</td>
<td>113.33</td>
<td>21.67</td>
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<tr>
<td>2015</td>
<td>5</td>
<td>108.33</td>
<td>113.33</td>
<td>21.67</td>
</tr>
<tr>
<td>Change</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
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

- Aurora Street
- Barton Street Watermain
- Dartnall Road
- Ferguson Avenue
Public Works – Engineering Services

2014 SPECIAL PROJECTS

- East Mountain Trail Loop
- Mountain Transit Centre
- Fesseden S.W.M. Pond
- Pearl St. Pedestrian Bridge
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
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 5th/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
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
2014 KEY PROJECTS

Right of Way (ROW) Reconstruction
- Centennial Parkway - King to Barton / Queenston Rd
- West 5th St - Mohawk College (south Access) to Gateview / Fennell Ave
- West 5th 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)
## EXTRAORDINARY BUDGET CHANGES - Tax Expenditures

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount ($000’s)</th>
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<tbody>
<tr>
<td>Streetlighting Program</td>
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<tr>
<td>Hydro</td>
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<tr>
<td>Increase in Locate costs</td>
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<tr>
<td>Realignment from Capital to Operating</td>
<td>464</td>
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</table>
Public Works – Engineering Services

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)

<table>
<thead>
<tr>
<th>Operating Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross</td>
</tr>
<tr>
<td>Revenues</td>
</tr>
<tr>
<td>Net</td>
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$ increase from 2014 1,294
% increase from 2014 21.6%

Cost per household

<table>
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<tbody>
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% increase from 2014 20.4%
Thank You