PUBLIC WORKS
2018 OPERATING BUDGET
February 9, 2018
Public Works contributes towards the City of Hamilton’s vision to be the best place to raise a child and age successfully.

Together with its partners, the department brings this vision to life, whether it’s moving people or goods comfortably and predictably along our roads, ensuring they are clear and in good repair, making our drinking water safe and reliable, keeping waste out of our environment and recovering resources for sustainability.

Public Works provides services that are central to the lives of Hamiltonians.
## SERVICES AND SUB-SERVICES

### Cemeteries
- Active Cemetery Management
- Dormant Cemetery Management
- Active Cemeteries Support Services

### Corporate Security

### Energy Initiatives
- Energy Engineering Services
- Utilities

### Energy Initiatives
- Energy Engineering Services
- Utilities

### Engineering Services
- Asset Management
- Construction Services
- Corridor Services
- Design Services
- Survey and Technical Services
- Waterfront Development Initiative

### Facilities Management
- Accommodations
- Capital Planning and Project Management
- Golf Courses
- Facilities Operations and Maintenance
- Energy Engineering Services
- Facilities Planning and Business Support
- Stadium Operations

### Forestry
- Tree Maintenance
- Tree Planting
- Tree Maintenance and Planting Support Services

### Fleet Services Management
- Capital Planning and Contract Management
- Fleet Maintenance
- Materials, Fuel and Systems Management
- Regulatory Compliance and Driver Training

### Horticultural Programs
- Beautification
- Beautification Support Services

### Parks and Open Space Access
- Parks Maintenance
- Planning, Design, Development and Acquisition
- Natural Open Spaces
- Parks and Natural Open Space Support Services
SERVICES AND SUB-SERVICES

**Public Transportation**
- Conventional Public Transit
- Rapid Transit
- Specialized Public Transit

**Roadway Access**
- Right of Way Infrastructure Maintenance Support Services
- Right of Way Infrastructure Repairs and Maintenance

**Storm Water Management**
- Infrastructure Maintenance
- Storm Water Collection
- Storm Water Support Services
- Storm Water Treatment

**Solid Waste Management**
- Bulk Waste Collection Services
- Cleanliness Services
- Drop Off and Transfer Facilities
- Garbage and Organic Waste Collection
- Leaf and Yard Waste Collection Services
- Organic Processing
- Recycling Collection
- Recycling Processing
- Solid Waste Support Services
- Waste Disposal and Closed Landfills

**Transportation Services**
- Environmental Planning
- Sustainable Mobility and Active Transportation
- Traffic Engineering and Road Safety
- Traffic Signals, Traffic Signs and Traffic Pavement Markings

**Wastewater Collection and Treatment**
- Wastewater Collection
- Wastewater Support Services
- Wastewater Treatment

**Water Supply and Distribution**
- Water Distribution
- Water Supply
- Water Support Services
2017 HIGHLIGHTS
Public Works
OUR PRIORITIES

COMMUNITY ENGAGEMENT & PARTICIPATION
Hamilton has an open, transparent and accessible approach to City government that engages with and empowers all citizens to be involved in their community.

ECONOMIC PROSPERITY & GROWTH
Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.

HEALTHY & SAFE COMMUNITIES
Hamilton is a safe and supportive city where people are active, healthy, and have a high quality of life.

CLEAN & GREEN
Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

BUILT ENVIRONMENT & INFRASTRUCTURE
Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

CULTURE & DIVERSITY
Hamilton is a thriving, vibrant place for arts, culture, and heritage where diversity and inclusivity are embraced and celebrated.

OUR PEOPLE & PERFORMANCE
Hamiltonians have a high level of trust and confidence in their City government.
Clean & Green
2017 Highlights
10,072 🕯️ High pressure sodium lights converted to LED

11,279 🌳 Trees planted under the City-Wide Tree Planting Program

225 🚬 alternative water treatment mats installed at the Glanbrook Landfill

1.9% 🔌 Reduction in energy consumption since 2016

41 🏞️ New solar devices for pedestrian signals and school zone flashers installed

CNG 19 Diesel buses replaced with new compressed natural gas (CNG) buses

42.4% 🚚 Waste Diversion achieved

128,300 🗑️ Landfill Tonnes

Diverted 46,500 tonnes of blue box materials

Diverted 31,000 tonnes of Green Bin materials

Diverted 17,000 tonnes of Leaf and Yard Waste

246,000 🌿 Plants Grown

 Beautified

314 🌷 floral traffic islands

72 ⛩️ roundabouts

113 🌿 perennial medians

78 ☏️ civic buildings

701 🌸 hanging baskets
Built Environment & Infrastructure
2017 Highlights
BUILT ENVIRONMENT & INFRASTRUCTURE HIGHLIGHTS

• Commenced construction of Gage Park Tropical Greenhouse

• Started construction at William Connell City-Wide Park

• Completed renovations at:
  • Beverly and Carlisle Arenas
  • Waterdown and Binbrook Memorial Halls
  • Ancaster Aquatic Centre
  • Montgomery Park Fieldhouse
• Prepared and constructed Stage Three of the Glanbrook Landfill (approx. 25 years remaining)

• Completed condition assessments and plans for short and medium term maintenance for escarpment crossings

• Tendered 95% of the right-of-way capital program
CAPITAL DELIVERY

Centennial Sewer Trunk

Wilson Street Reconstruction

York Boulevard Reconstruction

Sherman Access West

Montgomery Drive Reconstruction

Upper Sherman Reconstruction
CAPITAL DELIVERY

Dartnall Road Culvert
Bell Road Culvert Replacement
Confederation Beach Park
Joe Sams Park
William Connell Park
Borer’s Creek
Grightmire Arena
Provincial Offences Building
Bernie Morelli Recreation Centre
Ancaster Aquatic Centre
Huntington Park Rec Centre
Binbrook Memorial
HEALTHY & SAFE COMMUNITIES HIGHLIGHTS

- **50** Traffic monitoring cameras installed through the Advanced Traffic Management System
- **6** New accessible pedestrian signals installed
- **2,100** Security cameras installed on buses
- **20** Small drinking water systems (wells) received major upgrades
- **Year 5** of the Emerald Ash Borer Management Program complete
- **2nd Year** of the Strategic Road Safety Program
OUR PEOPLE & PERFORMANCE HIGHLIGHTS

- Implementation of performance measurement program and balanced scorecard

- Develop leaders through the Cutting Edge of Leadership program (64 staff)

- Successfully surveyed staff through the Our People Survey (65% participation rate in Public Works)
Community Engagement & Participation
2017 Highlights
COMMUNITY ENGAGEMENT & PARTICIPATION HIGHLIGHTS

- Indigenous community engagement
- Joint Stewardship Board
- Transit route re-design
- Public information centres
ECONOMIC PROSPERITY & GROWTH HIGHLIGHTS

• Open for Business
• Hamilton Youth in Construction
• Social procurement
Continuous Improvement
2017 Highlights
## Continuous Improvement Highlights

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects Started</td>
<td>66</td>
</tr>
<tr>
<td>Projects Closed</td>
<td>34</td>
</tr>
<tr>
<td>Customer Focus Projects</td>
<td>4</td>
</tr>
<tr>
<td>Efficiency Projects</td>
<td>8</td>
</tr>
<tr>
<td>Process Accuracy Projects</td>
<td>4</td>
</tr>
<tr>
<td>Processes Optimized</td>
<td>27</td>
</tr>
<tr>
<td>Staff Involved</td>
<td>350+</td>
</tr>
<tr>
<td>Ideas Generated</td>
<td>220+</td>
</tr>
<tr>
<td>Kaizens</td>
<td>12</td>
</tr>
<tr>
<td>5S Events</td>
<td>5</td>
</tr>
<tr>
<td>Green Belts Trained</td>
<td>9</td>
</tr>
<tr>
<td>Public Works Green Belts</td>
<td>20</td>
</tr>
</tbody>
</table>

---

**Public Works**

2018 Operating Budget Presentation
ISSUES & TRENDS
Public Works

PUBLIC WORKS
2018 Operating Budget Presentation
2017 TRENDS AND ISSUES

Extreme Weather & Climate Change
Increased rainfall and flooding impacting operations, activities, and budget.

Legislation
Changing provincial and federal legislation. (i.e. *Waste Free Ontario Act*, and *Accessibility for Ontarians with Disabilities Act*).

Workforce Management
Retirements, recruitment, overtime and absenteeism.
Energy & Fuel Markets
Electricity, diesel, gasoline and natural gas energy markets remain volatile and are impacted by various factors such as global market influences, and supply and demand.

Lease Contracts & Accommodations
Expiring leases resulted in staff moving from leased properties into City-owned properties. Master Accommodation Plan will consider other expiring leases in 2019 and 2021.
2018-2021 TRENDS AND ISSUES

**Technology**
Managing and maximizing technology with strategic deployment solutions (i.e. vehicle locators, document and data control, mobile applications and street lighting).

**Growth**
Operating impacts from growth related activities are not readily identified or captured in real time. Budgetary constraints make it a challenge to accommodate these growth impacts.

**Collective Bargaining Agreements**
Negotiation and renewal of various Collective Bargaining Agreements.
Legislation
Continue responding to changing provincial and federal legislation. (i.e. Waste Free Ontario Act, Construction Lien Act, Bill 6 – Infrastructure for Jobs and Prosperity Act; Bill 148 – Fair Workplaces, Better Jobs Act)

Workforce Management
Evolving within Public Works over the next four years. Creating a healthy, engaged and supportive workplace will enable the department to attract and retain knowledgeable staff, while at the same time plan for the exit of long standing and knowledgeable employees.
Energy & Fuel Markets
Electricity, diesel, gasoline and natural gas energy markets remain volatile and are impacted by various factors such as global market influences, and supply and demand.

Extreme Weather & Climate Change
Temperature fluctuations, increased rainfall and potential for flooding impact operations and increase activities, which can result in an unexpected budget deficit.

Contract Renewals
Possible budget pressures as a result of contract renewals in Solid Waste Management and Winter Control in 2020.
2018-2021 TRENDS AND ISSUES

Road Conditions – Overall Condition Index (OCI)

Upper Sherman Ave. (100)  
(Near Rowntree Dr.)

Rymal Rd. (45)  
(Between West 5th and Garth St.)

Parkdale Ave. (25)  
(Near Nikola Tesla Blvd.)

100  80  60  40  20  0

GOOD  FAIR  POOR
2018-2021 TRENDS AND ISSUES

Road Conditions – Overall Condition Index (OCI)

CURRENT CITY-WIDE AVERAGE (62)

Council’s current annual investment $25.5 million annually

100 80 60 40 20 0

GOOD FAIR POOR

Council’s current annual investment $25.5 million annually
Road Conditions – Overall Condition Index (OCI)

10-YEAR PROJECTED CITY-WIDE AVERAGE (54)
WITH CURRENT $25.5 MILLION/YEAR IN FUNDING

100  80  60  40  20  0

GOOD  FAIR  POOR

2018-2021 TRENDS AND ISSUES
2018-2021 TRENDS AND ISSUES

Road Conditions – Overall Condition Index (OCI)

10-YEAR PROJECTED CITY-WIDE AVERAGE (62)
REQUIRES $52.1 MILLION/YEAR IN FUNDING
2018-2021 TRENDS AND ISSUES

Maintenance Costs
Per lane kilometre, per year

- GOOD: 61.9%
- FAIR: 37.2%
- POOR: 0.9%

Graph showing maintenance costs per lane kilometre per year from $0 to $301,000, with percentage breakdowns for GOOD, FAIR, and POOR conditions.
Bill 6 – Infrastructure for Jobs and Prosperity Act

Corporate Asset Management

Housing
- Energy, Fleet & Facilities
- Horizontal Infrastructure

Heritage
- Right of Way
- Vertical Infrastructure

Police
- Open Space

Lodges
- Water

Public Works
- Waste
- Transit

Other
- (HCA, Corporate Real Estate)
Facilities Management
Manage $2.1 Billion in Assets

Corridor Services
Manage 45,850 Street Lights

Transportation Services
Manage 600 Traffic Signals

Solid Waste Management Operate:
1 Open Landfill
12 Closed Landfills
1 Material Recycling Facility
1 Central Composting Facility
1 LYW Composting Pad

2,045 km of watermains

Manage 69 Municipal Cemeteries

Manage and maintain 2,400 km of sidewalks

Manage and maintain 2,945 km of Roads

Fleet Services
Manage and Maintain 1,350 units

Parks and Open Spaces
Manage 520 Park Locations

Road Maintenance
Manage 377 Bridges and Structures
**PERFORMANCE METRICS**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.4 Million rides provided by HSR</td>
<td></td>
</tr>
<tr>
<td>Public Transportation Drive Approximately</td>
<td>16,500,000 km</td>
</tr>
<tr>
<td>Water Supply and Distribution Provide</td>
<td>77,200 ML</td>
</tr>
<tr>
<td>Clean Water</td>
<td></td>
</tr>
<tr>
<td>Solid Waste Management Manage</td>
<td>222,800 tonnes</td>
</tr>
<tr>
<td>Waste</td>
<td></td>
</tr>
<tr>
<td>Winter Operations Maintain</td>
<td>6,431 Lane km of Road</td>
</tr>
<tr>
<td>Grassland Mown</td>
<td>53,300</td>
</tr>
<tr>
<td>125,000 ML Wastewater Treated</td>
<td></td>
</tr>
</tbody>
</table>

Hamilton

2018 Operating Budget Presentation
Public Works Balanced Scorecard

- Measures key objectives
- Provides visibility to performance and indicates when corrections or adjustments are needed

- Four sections:
  - People
  - Process
  - Financial
  - Strategic Goals
<table>
<thead>
<tr>
<th>Objective</th>
<th>Metric</th>
<th>Target</th>
<th>YTD</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Intensity Comparison</td>
<td>% change total energy 2017 vs 2016 (ekWh/Sq.ft)</td>
<td>-1.8%</td>
<td>-5.5%</td>
<td></td>
</tr>
<tr>
<td>Forestry – Heathy tree canopy through tree planting</td>
<td>Plant 7,000 trees in 2017</td>
<td>7,000</td>
<td>11,279</td>
<td></td>
</tr>
<tr>
<td>Street Light Conversion</td>
<td>Number of LED street light conversions</td>
<td>10,000</td>
<td>10,072</td>
<td></td>
</tr>
<tr>
<td>Capital Program – Tendering</td>
<td>% capital tendered by year end</td>
<td>95%</td>
<td>95%</td>
<td></td>
</tr>
</tbody>
</table>
## METRICS – KEY PERFORMANCE INDICATORS

<table>
<thead>
<tr>
<th>Objective</th>
<th>Metric</th>
<th>Target</th>
<th>YTD</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transit – Cancelled Service</td>
<td>Hours of cancelled service</td>
<td>0</td>
<td>7,508 (0.86%)</td>
<td></td>
</tr>
<tr>
<td>Water – Safe Drinking Water</td>
<td>Maintain zero confirmed adverse water quality events</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Wastewater Collection &amp; Treatment</td>
<td>Number of effluent exceedances</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
• Modifying existing performance metrics to better reflect evolving operations

• Continue performance measurement by incorporating performance metrics and indicators down to the sectional level

• Ensuring efficiency, economy and effective measures exist in service delivery programs where there is value
MAJOR INITIATIVES

Public Works
• Year three of the 10 Year Transit Strategy

• Escarpment maintenance and associated asset management strategy

• Project management standardization in collaboration with corporate project management initiatives

• Year six of the 10 Year Emerald Ash Borer Management Plan
MAJOR INITIATIVES 2018

• Complete construction at:
  • Bernie Morelli Recreation Centre
  • Provincial Offences Administration Office
  • Gage Park Tropical House

• Corporate Security Office

• Leverage technology for mobile maintenance management system

• Deliver Public Works related projects on schedule supporting the Waterfront Development at Pier 8

• Our People Survey culture initiative and leadership / succession planning
MAJOR INITIATIVES 2019 to 2021

• Maintain the schedule to achieve a corporate energy intensity reduction target of 20% below 2005 levels by 2020.

• Develop, issue, evaluate and award Request for Proposals for the delivery of waste management and winter operation services.

• Explore other technology applications to address the need for more cost effective road rehabilitation strategies.
MAJOR INITIATIVES 2019 to 2021

• Prepare compliance with Infrastructure for Jobs and Prosperity Act (Bill 6) – asset management

• Public Works, through Engineering Services, is providing direction and technical support for the LRT project for all non-guideway related infrastructure

• Continue with the implementation of the 10 Year Transit Strategy with a focus on modal split and growth
2018 PRELIMINARY TAX OPERATING BUDGET

Public Works Department
ORGANIZATION DESIGN CRITERIA

• Take into account and address the reciprocal nature of work within Public Works and other parts of the City

• Reduce co-ordination costs

• Resolve/reduce redundant management work

• Group specialized tasks that require little or no crossover with other parts of the organization

• Optimize the use of human capital

• Establish clear accountability for work
General Manager
(1.00 FTE)

Dan McKinnon

Administration
(1.00 FTE)

Associate General Manager
(1.00 FTE)

John Mater

Continuous Improvement
(1.00 FTE)

Energy, Fleet & Facilities
(196.23 FTE)

Rom D’Angelo

Engineering Services
(124.33 FTE)

Gary Moore/Gord McGuire

Environmental Services
(490.19 FTE)

Craig Murdoch

Hamilton Water
(302.25 FTE)

Andrew Grice

Roads & Traffic
(405.38 FTE)

Betty Matthews-Malone

Transit
(738.21 FTE)

Debbie Dalle Vedove

<table>
<thead>
<tr>
<th>Complement (FTE)</th>
<th>Management (Mgt)</th>
<th>Other</th>
<th>Total</th>
<th>Staff to Mgt Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>36.00</td>
<td>1,902.67</td>
<td>1,938.67</td>
<td>52.85:1</td>
</tr>
<tr>
<td>2018</td>
<td>36.00</td>
<td>1,922.34</td>
<td>1,958.34</td>
<td>53.39:1</td>
</tr>
<tr>
<td>Change</td>
<td>0.00</td>
<td>30.00</td>
<td>30.00</td>
<td></td>
</tr>
<tr>
<td>2018 (Inclusive of Hamilton Water)</td>
<td>48.00</td>
<td>2,212.59</td>
<td>2,260.59</td>
<td>46.09:1</td>
</tr>
</tbody>
</table>
2018 Gross Capital & Operating Budgets
$969.1 million

GROSS TAX OPERATING
$351.6M
(FCS17081/Dec. 8)

RATE OPERATING
$210.9M
(FCS17081/Dec. 8)

RATE CAPITAL
$219.3M
(FCS17081/Dec. 8)

TAX CAPITAL
$187.3M
(FCS17099/Dec. 8)
GROSS TAX OPERATING BUDGET

Gross Expenditures
$351.6 million

REVENUE
$119.3M

TAX LEVY
$232.3M
2018 REVENUES: RECYCLING

Blue Box Program Plan Funding
(Former Waste Diversion Ontario Funding)

Recycling Program Revenues

2018 Operating Budget Presentation
NATURAL GAS AND DIESEL TRENDING – VEHICLE

<table>
<thead>
<tr>
<th>Year</th>
<th>Diesel</th>
<th>Natural Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 Actuals</td>
<td>$14,000,000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>2014 Actuals</td>
<td>$16,000,000</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>2015 Actuals</td>
<td>$14,000,000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>2016 Actuals</td>
<td>$12,000,000</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>*2017 Actuals</td>
<td>$10,000,000</td>
<td>$6,000,000</td>
</tr>
<tr>
<td>2018 Requested Budget</td>
<td>$12,000,000</td>
<td>$4,000,000</td>
</tr>
</tbody>
</table>

*2017 Actuals as of Feb/6/18
## 2018 Operating Budget by Division

### Public Works – Tax

<table>
<thead>
<tr>
<th>Division</th>
<th>2017 Restated Net</th>
<th>2018 Preliminary Gross</th>
<th>2018 Preliminary Net</th>
<th>$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>PW-General Administration</td>
<td>-1,726,810</td>
<td>-1,729,210</td>
<td>-1,729,210</td>
<td>-2,400</td>
<td>(0.1%)</td>
</tr>
<tr>
<td>Energy Fleet and Facilities</td>
<td>9,145,100</td>
<td>23,256,680</td>
<td>9,145,520</td>
<td>420</td>
<td>0.0%</td>
</tr>
<tr>
<td>Engineering Services</td>
<td>7,074,910</td>
<td>25,793,590</td>
<td>6,324,850</td>
<td>-750,060</td>
<td>(10.6%)</td>
</tr>
<tr>
<td>Environmental Services</td>
<td>75,181,100</td>
<td>97,421,060</td>
<td>76,308,440</td>
<td>1,127,340</td>
<td>1.5%</td>
</tr>
<tr>
<td>Operations</td>
<td>63,111,020</td>
<td>65,488,170</td>
<td>63,994,740</td>
<td>883,720</td>
<td>1.4%</td>
</tr>
<tr>
<td>Transit</td>
<td>60,299,290</td>
<td>121,858,210</td>
<td>66,503,520</td>
<td>6,204,230</td>
<td>10.3%</td>
</tr>
<tr>
<td>Transportation</td>
<td>11,552,340</td>
<td>19,556,980</td>
<td>11,725,510</td>
<td>173,170</td>
<td>1.5%</td>
</tr>
<tr>
<td><strong>Total Public Works – Tax</strong></td>
<td><strong>224,636,950</strong></td>
<td><strong>351,645,480</strong></td>
<td><strong>232,273,370</strong></td>
<td><strong>7,636,420</strong></td>
<td><strong>3.4%</strong></td>
</tr>
</tbody>
</table>
## 2018 OPERATING BUDGET BY DIVISION

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<td><strong>7,636,420</strong></td>
<td><strong>3.4%</strong></td>
</tr>
<tr>
<td>Excluding Transit</td>
<td>60,299,290</td>
<td>121,858,210</td>
<td>66,503,520</td>
<td>6,204,230</td>
<td>10.3%</td>
</tr>
<tr>
<td><strong>Public Works – Tax excluding Transit</strong></td>
<td><strong>164,337,660</strong></td>
<td><strong>229,787,270</strong></td>
<td><strong>165,769,850</strong></td>
<td><strong>1,432,190</strong></td>
<td><strong>0.9%</strong></td>
</tr>
</tbody>
</table>

2018 vs. 2017 net change
## 2018 Budget Drivers

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Related Costs (excludes Winter Season)</td>
<td>$3,800</td>
</tr>
<tr>
<td>Transit Strategy</td>
<td>$2,100</td>
</tr>
<tr>
<td>DARTS Contractual/Ridership</td>
<td>$1,680</td>
</tr>
<tr>
<td>Winter Control &amp; Maintenance</td>
<td>$1,100</td>
</tr>
<tr>
<td>Waste Contracts</td>
<td>$870</td>
</tr>
<tr>
<td>PRESTO Operating Agreement</td>
<td>$356</td>
</tr>
<tr>
<td>Reduced Energy cost for Street Lighting</td>
<td>($750)</td>
</tr>
</tbody>
</table>
Questions?
Complement (FTE) | Management (Mgt) | Other | Total | Staff to Mgt Ratio
---|---|---|---|---
2017 | 8.00 | 188.23 | 196.23 | 23.53:1
2018 | 8.00 | 188.23 | 196.23 | 23.53:1
Change | 0.00 | 0.00 | 0.00 | 23.53:1
### Energy Fleet and Facilities

#### 2018 vs 2017 Net Change

<table>
<thead>
<tr>
<th>Service</th>
<th>2017 Restated Net</th>
<th>2018 Preliminary Gross</th>
<th>2018 Preliminary Net</th>
<th>$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Facility Ops &amp; Tech</td>
<td>1,341,420</td>
<td>5,236,510</td>
<td>1,168,770</td>
<td>(172,650)</td>
<td>(12.9%)</td>
</tr>
<tr>
<td>Central Fleet</td>
<td>83,830</td>
<td>2,092,340</td>
<td>386,010</td>
<td>302,180</td>
<td>360.5%</td>
</tr>
<tr>
<td>Community Facility Ops &amp; Tech Serv</td>
<td>2,974,370</td>
<td>3,131,050</td>
<td>3,131,050</td>
<td>156,680</td>
<td>5.3%</td>
</tr>
<tr>
<td>Director EFF</td>
<td>463,810</td>
<td>531,000</td>
<td>516,850</td>
<td>53,040</td>
<td>11.4%</td>
</tr>
<tr>
<td>Energy Initiatives</td>
<td>633,710</td>
<td>1,403,180</td>
<td>37,420</td>
<td>(596,290)</td>
<td>(94.1%)</td>
</tr>
<tr>
<td>Facilities Planning and Business Support</td>
<td>239,400</td>
<td>786,000</td>
<td>419,530</td>
<td>180,130</td>
<td>75.2%</td>
</tr>
<tr>
<td>Golf &amp; Stadium Ops</td>
<td>3,141,850</td>
<td>8,091,440</td>
<td>3,196,360</td>
<td>54,510</td>
<td>1.7%</td>
</tr>
<tr>
<td>Strategic Plan &amp; Capital Compliance</td>
<td>266,710</td>
<td>1,985,160</td>
<td>289,530</td>
<td>22,820</td>
<td>8.6%</td>
</tr>
<tr>
<td><strong>Total Energy Fleet and Facilities</strong></td>
<td>9,145,100</td>
<td>23,256,680</td>
<td>9,145,520</td>
<td>420</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
# 2018 BUDGET DRIVERS – ENERGY, FLEET & FACILITIES

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Related Costs</td>
<td>$114</td>
</tr>
<tr>
<td>Energy Utility Rebates Revenue</td>
<td>($475)</td>
</tr>
</tbody>
</table>
Director
(1.00 FTE)

Gary Moore

Administrative Assistant II
(1.00 FTE)

Manager, Asset Management
(23.00 FTE)

Manager, Construction
(34.67 FTE)

Manager, Design
(24.66 FTE)

Manager, Geomatics & Corridor Management
(37.00 FTE)

Waterfront Development
(3.00 FTE)

<table>
<thead>
<tr>
<th>Complement (FTE)</th>
<th>Management (Mgt)</th>
<th>Other</th>
<th>Total</th>
<th>Staff to Mgt Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>6.00</td>
<td>118.33</td>
<td>124.33</td>
<td>19.72:1</td>
</tr>
<tr>
<td>2018</td>
<td>6.00</td>
<td>118.33</td>
<td>124.33</td>
<td>19.72:1</td>
</tr>
<tr>
<td>Change</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>
## 2018 OPERATING BUDGET – ENGINEERING SERVICES

### Engineering Services

<table>
<thead>
<tr>
<th></th>
<th>2017 Restated Net</th>
<th>2018 Preliminary Gross</th>
<th>2018 Preliminary Net</th>
<th>$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Management</td>
<td>-</td>
<td>2,649,800</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Construction</td>
<td>-</td>
<td>4,489,320</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Design Services</td>
<td>-</td>
<td>2,870,410</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Director of Engineering Services</td>
<td>-</td>
<td>1,680,420</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Geomatics and Corridor Management</td>
<td>7,074,910</td>
<td>13,334,470</td>
<td>6,324,850</td>
<td>(750,060)</td>
<td>(10.6%)</td>
</tr>
<tr>
<td>Waterfront Development</td>
<td>-</td>
<td>769,170</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Engineering Services</strong></td>
<td>7,074,910</td>
<td>25,793,590</td>
<td>6,324,850</td>
<td>(750,060)</td>
<td>10.6%</td>
</tr>
</tbody>
</table>

-2018 vs 2017 Net Change:
## 2018 BUDGET DRIVERS – ENGINEERING SERVICES

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Related Costs</td>
<td>$292</td>
</tr>
<tr>
<td>Reduced Energy Costs for Street Lighting</td>
<td>($750)</td>
</tr>
<tr>
<td>Recoveries from Capital – increased recoveries to match</td>
<td>($261)</td>
</tr>
<tr>
<td>costs associated with Capital projects</td>
<td></td>
</tr>
</tbody>
</table>
**ENVIRONMENTAL SERVICES**

<table>
<thead>
<tr>
<th>Complement (FTE)</th>
<th>Management (Mgt)</th>
<th>Other</th>
<th>Total</th>
<th>Staff to Mgt Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>7.00</td>
<td>483.19</td>
<td>490.19</td>
<td>69.03:1</td>
</tr>
<tr>
<td>2018</td>
<td>7.00</td>
<td>483.19</td>
<td>490.19</td>
<td>69.03:1</td>
</tr>
<tr>
<td>Change</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>
## Environmental Services

<table>
<thead>
<tr>
<th></th>
<th>2017 Restated Net</th>
<th>2018 Preliminary Gross</th>
<th>2018 Preliminary Net</th>
<th>$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling &amp; Waste Disposal</td>
<td>6,872,500</td>
<td>22,189,460</td>
<td>6,973,050</td>
<td>100,550</td>
<td>1.5%</td>
</tr>
<tr>
<td>Waste Collections</td>
<td>30,141,550</td>
<td>30,698,750</td>
<td>30,648,560</td>
<td>507,010</td>
<td>1.7%</td>
</tr>
<tr>
<td>Business Programs</td>
<td>1,680,090</td>
<td>1,816,060</td>
<td>1,705,000</td>
<td>24,910</td>
<td>1.5%</td>
</tr>
<tr>
<td>Forestry &amp; Horticulture</td>
<td>12,439,080</td>
<td>13,984,080</td>
<td>12,626,040</td>
<td>186,960</td>
<td>1.5%</td>
</tr>
<tr>
<td>Landscape &amp; Architectural Serv</td>
<td>51,980</td>
<td>1,879,240</td>
<td>-</td>
<td>(51,980)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td>Parks &amp; Cemeteries</td>
<td>23,995,900</td>
<td>26,853,470</td>
<td>24,355,790</td>
<td>359,890</td>
<td>1.5%</td>
</tr>
<tr>
<td><strong>Total Environmental Services</strong></td>
<td><strong>75,181,100</strong></td>
<td><strong>97,421,060</strong></td>
<td><strong>76,308,440</strong></td>
<td><strong>1,127,340</strong></td>
<td><strong>1.5%</strong></td>
</tr>
</tbody>
</table>
## 2018 Budget Drivers – Environmental Services

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Related Costs</td>
<td>$850</td>
</tr>
<tr>
<td>Waste Collections</td>
<td>$489</td>
</tr>
<tr>
<td>Loss of Central Composting Facility Merchant Capacity Revenues</td>
<td>$381</td>
</tr>
<tr>
<td>Glanbrook Landfill property tax increase</td>
<td>$179</td>
</tr>
<tr>
<td>Increased Fees &amp; General (vehicle fee, commodity revenues)</td>
<td>($124)</td>
</tr>
<tr>
<td>Increased Recoveries to match work associated with Capital projects</td>
<td>($132)</td>
</tr>
<tr>
<td>Reduction in park maintenance supplies</td>
<td>($147)</td>
</tr>
<tr>
<td>Increased Resource Productivity and Recovery Authority (formerly Waste Diversion Ontario Subsidy)</td>
<td>($434)</td>
</tr>
</tbody>
</table>
OPERATIONS

2018 Operating Budget Presentation

<table>
<thead>
<tr>
<th>Complement (FTE)</th>
<th>Management (Mgt)</th>
<th>Other</th>
<th>Total</th>
<th>Staff to Mgt Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>3.00</td>
<td>295.56</td>
<td>298.56</td>
<td>98.52:1</td>
</tr>
<tr>
<td>2018</td>
<td>3.00</td>
<td>295.56</td>
<td>298.56</td>
<td>98.52:1</td>
</tr>
<tr>
<td>Change</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>
## 2018 OPERATING BUDGET – OPERATIONS

### Operations

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018 Restated</th>
<th>2018 Preliminary</th>
<th>2018 Preliminary</th>
<th>$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads Maintenance</td>
<td>61,790,730</td>
<td>63,703,490</td>
<td>62,400,120</td>
<td>609,390</td>
<td>1.0%</td>
<td></td>
</tr>
<tr>
<td>Capital Rehab and Technical Ops</td>
<td>1,320,290</td>
<td>1,784,680</td>
<td>1,594,620</td>
<td>274,330</td>
<td>20.8%</td>
<td></td>
</tr>
<tr>
<td><strong>Total Operations</strong></td>
<td><strong>63,111,020</strong></td>
<td><strong>65,488,170</strong></td>
<td><strong>63,994,740</strong></td>
<td><strong>883,720</strong></td>
<td><strong>1.4%</strong></td>
<td></td>
</tr>
</tbody>
</table>
## 2018 BUDGET DRIVERS – OPERATIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winter Season (Includes Employee Related Expenses)</td>
<td>$1,050</td>
</tr>
<tr>
<td>“Non Winter Season” Employee Related</td>
<td>$160</td>
</tr>
<tr>
<td>Vehicle Expenses (Central Fleet charges, fuel, licences)</td>
<td>($417)</td>
</tr>
</tbody>
</table>
Director
(1.00 FTE)

Debbie Dalle Vedove

Administrative Assistant II
(1.00 FTE)

Manager, Special Projects
(1.00 FTE)

Manager, Transit Operations
(546.30 FTE)

Manager, Transit Fleet Maintenance
(131.07 FTE)

Manager, Customer Experience & Innovation
(28.34 FTE)

Manager, Transit Support Services
(14.00 FTE)

Manager, Transit Planning & Infrastructure
(15.50 FTE)

<table>
<thead>
<tr>
<th>Complement (FTE)</th>
<th>Management (Mgt)</th>
<th>Other</th>
<th>Total</th>
<th>Staff to Mgt Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>7.00</td>
<td>702.21</td>
<td>709.21</td>
<td>100.32:1</td>
</tr>
<tr>
<td>2018</td>
<td>7.00</td>
<td>731.21</td>
<td>738.21</td>
<td>104.46:1</td>
</tr>
<tr>
<td>Change</td>
<td>0.00</td>
<td>29.00</td>
<td>29.00</td>
<td></td>
</tr>
</tbody>
</table>
## 2018 OPERATING BUDGET – TRANSIT

### Transit

| Category                              | 2017 Restated Net | 2018 Preliminary Gross | 2018 Preliminary Net | 2018 $ | %  
|----------------------------------------|-------------------|------------------------|----------------------|--------|-----
| Customer Experience and Innovation    | 2,909,520         | 3,779,500              | 3,315,080            | 405,560 | 13.9%
| Transit Planning and Infrastructure   | 16,847,350        | 20,978,760             | 18,744,580           | 1,897,230 | 11.3%
| Director of Transit                   | 529,100)          | 553,450)               | 553,450)             | 24,350) | 4.6%
| Financial Charges & General Revenue  | (35,284,480)      | (11,071,600)           | (34,469,590)         | 814,890) | (2.3%)  
| Operational Planning                  | 2,775,530)        | 2,718,200)             | 2,717,200)           | (58,330) | (2.1%)  
| Operations HSR                        | 42,579,000        | 51,717,290             | 44,813,230           | 2,234,230 | 5.2%
| Transit Fleet                         | 29,943,270        | 31,039,410             | 30,829,570           | 886,300) | 3.0%
| **Total Transit**                     | 60,299,290        | 121,858,210            | 66,503,520           | 6,204,230 | 10.3%
## 2018 BUDGET DRIVERS – TRANSIT

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 3 of 10 Year Strategy</td>
<td>$2,188</td>
</tr>
<tr>
<td>DARTS Contractual Increase</td>
<td>$1,680</td>
</tr>
<tr>
<td>PRESTO Operating Agreement</td>
<td>$356</td>
</tr>
<tr>
<td>Employee Related Increases</td>
<td>$1,738</td>
</tr>
</tbody>
</table>
Director
(1.00 FTE)

John Mater

Administrative Assistant II
(1.00 FTE)

Manager, Traffic Operations & Engineering
(97.82 FTE)

Manager, Policy & Programs
(7.00 FTE)

Manager, Transportation Management
(10.33 FTE)

SPM Continuous Improvement
(1.00 FTE)

Complement (FTE) | Management (Mgt) | Other | Total | Staff to Mgt Ratio
--- | --- | --- | --- | ---
2017 | 4.00 | 113.15 | 117.15 | 28.29:1
2018 | 4.00 | 114.15 | 118.15 | 28.54:1
Change | 0.00 | 1.00 | 1.00 |
## Transportation

<table>
<thead>
<tr>
<th></th>
<th>2017 Restated Net</th>
<th>2018 Preliminary Gross</th>
<th>2018 Preliminary Net</th>
<th>$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director Office Transportation</td>
<td>442,410</td>
<td>443,200</td>
<td>443,200</td>
<td>790</td>
<td>0.2%</td>
</tr>
<tr>
<td>Policy &amp; Programs</td>
<td>1,919,970</td>
<td>2,003,860</td>
<td>1,949,860</td>
<td>29,890</td>
<td>1.6%</td>
</tr>
<tr>
<td>Traffic Operations &amp; Engineering</td>
<td>9,176,570</td>
<td>15,353,060</td>
<td>9,332,450</td>
<td>155,880</td>
<td>1.7%</td>
</tr>
<tr>
<td>Transportation Planning</td>
<td>13,390</td>
<td>1,756,860</td>
<td>-</td>
<td>(13,390)</td>
<td>(100.0%)</td>
</tr>
<tr>
<td><strong>Total Transportation</strong></td>
<td>11,552,340</td>
<td>19,556,980</td>
<td>11,725,510</td>
<td>173,170</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

- 2018 vs 2017 Net Change -
## 2018 BUDGET DRIVERS – TRANSPORTATION

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Related Costs</td>
<td>$350</td>
</tr>
<tr>
<td>Reserves/Recoveries (Facilities, Vehicle/Equipment)</td>
<td>$200</td>
</tr>
<tr>
<td>Capital Recoveries (Employee Related, Rents/Contracts)</td>
<td>($90)</td>
</tr>
<tr>
<td>Vehicle Expenses</td>
<td>($100)</td>
</tr>
<tr>
<td>Revenue – Fines, Scrap Metal</td>
<td>($160)</td>
</tr>
</tbody>
</table>
THANK YOU