ENVIRONMENTAL SERVICES
2020 TO 2022 BUDGET
PRESENTATION TO
COMMITTEE OF THE WHOLE

Erin Mahoney
Commissioner, Environmental Services
December 5, 2019
ACCOMPLISHMENTS

• Remained a leader in water quality in the GTA and achieved some of highest water quality scores in province

• Region achieved the longest and largest Regional multi-year capacity assignment to date enabling growth for the next 7 year period to 2026 and beyond

BUDGET ADDRESSES FISCAL RESPONSIBILITIES

• Proactive asset management to manage aging and growing asset base

• Less dependency on simply building new infrastructure through One Water
ACCOMPLISHMENTS

• Doing more with less measurably through “Infra-stretching” unlocking wastewater capacity which helps to reduce spending on new infrastructure
• Received $56.3 million in Disaster Mitigation and Adaption Funding for 2 projects and $34.8 million in Clean Water and Wastewater Funding for 27 projects

BUDGET ADDRESSES FISCAL RESPONSIBILITIES

• Investing $18.9 million for Interim Servicing Solutions while awaiting approval of the Upper York project
ACCOMPLISHMENTS

• York Region continues to be a leader in Ontario with a diversion rate of 68%
• Diverted over 94% of waste from landfill

BUDGET ADDRESSES FISCAL RESPONSIBILITIES

• Capital upgrades to Material Recovery Facility to improve quality of mixed paper material by removing contaminants
• Actively working with local municipal partners to prepare for transition of the blue box to full producer responsibility as early as 2023
ACCOMPLISHMENTS

- Secured 170 hectares of environmental land through partnerships
- Received $10.1 million in Disaster Mitigation and Adaptation Funding to help increase the use of trees and other green infrastructure to combat climate change

BUDGET ADDRESSES FISCAL RESPONSIBILITIES

- Proactive asset management to address climate change impacts
- Future commissioning of Enhanced Streetscaping projects along our rapidways
MANAGING CORPORATE ENERGY AND ASSETS

ACCOMPLISHMENTS

• Completed the 2019 Regional Energy Conservation and Demand Management Plan
• Received certification for Forest Education Centre as the first Living Building in Canada

BUDGET ADDRESSES FISCAL RESPONSIBILITIES

• Assess emerging technologies to reduce energy use
• Building staff capacity to ensure leading edge asset management
ENSURING VALUE FOR MONEY

WATER $699
WASTEWATER $748
HYDRO $1,530
CELL PHONE $1,250
CABLE/INTERNET $1,480
GAS $1,160
FORESTRY $29
WASTE MANAGEMENT $300

PROVIDING QUALITY ENVIRONMENTAL SERVICES FOR LESS THAN $5/DAY PER HOUSEHOLD

(Annual Costs)
HOW DO WE MEASURE UP?

WATER AND WASTEWATER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME

Peel (0.39%)
Halton (0.59%)
Toronto (0.70%)
Hamilton (0.74%)
York Region (0.75%)

Durham (0.79%)
Ottawa (0.81%)
Waterloo (0.99%)
Niagara (1.06%)
Windsor (1.54%)

(2018 BMA Municipal Study)
SM4RT LIVING

Disaster Mitigation and Adaptation Fund — Receiving $66.4M in funding

Award for Machine Learning Model for I&I Analysis

Optical Sorter improves overall quality of fibre and plastic bales
LEVERAGING PRIVATE AND PUBLIC SECTOR EXPERTISE IN DELIVERY

WATER/WASTEWATER
47%
of direct costs for purchased water and treatment

WASTE
81%
of waste management costs are third party contracts

FORESTRY
54%
of direct costs are contracted services for planting, maintenance and partnerships
THE BUDGET SUPPORTS THE 2019 TO 2023 STRATEGIC PLAN

<table>
<thead>
<tr>
<th>ECONOMIC VITALITY</th>
<th>HEALTHY COMMUNITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRIORITY:</strong></td>
<td><strong>PRIORITY:</strong></td>
</tr>
<tr>
<td>Increase economic prosperity</td>
<td>Support community health, safety and well-being</td>
</tr>
<tr>
<td><strong>OBJECTIVES:</strong></td>
<td><strong>OBJECTIVES:</strong></td>
</tr>
<tr>
<td>1. Fostering an environment that attracts businesses, grows employment opportunities and attracts people</td>
<td>1. Supporting safe communities</td>
</tr>
<tr>
<td>2. Increasing access to efficient transportation options</td>
<td>2. Delivering and promoting affordable housing</td>
</tr>
<tr>
<td>3. Increasing access to efficient transportation options</td>
<td>3. Improving access to health and social support services</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUSTAINABLE ENVIRONMENT</th>
<th>GOOD GOVERNMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRIORITY:</strong></td>
<td><strong>PRIORITY:</strong></td>
</tr>
<tr>
<td>Build sustainable communities and protect the environment</td>
<td>Deliver trusted and efficient services</td>
</tr>
<tr>
<td><strong>OBJECTIVES:</strong></td>
<td><strong>OBJECTIVES:</strong></td>
</tr>
<tr>
<td>1. Delivering and promoting environmentally sustainable services</td>
<td>1. Ensuring reliable, responsive, effective, efficient and fiscally responsible service delivery</td>
</tr>
<tr>
<td>2. Encouraging growth in the Region’s centres, corridors and built-up urban areas</td>
<td>2. Managing the Region’s assets for current and future generations</td>
</tr>
<tr>
<td>3. Enhancing and preserving green space</td>
<td>3. Maintaining public confidence in Regional Government</td>
</tr>
</tbody>
</table>
Delivering 118 billion litres of clean and safe drinking water to protect public health

Addressing climate change through the Corporate Climate Change Action Plan helps build community resilience and promotes well-being
PRIORITY: SUSTAINABLE ENVIRONMENT

- Investing $2.5 billion to grow and maintain the water and wastewater networks to meet the needs of the growing population
- Maintaining high rates of waste diversion, currently at 94%, to manage waste as a resource
- Promoting reduction and reuse initiatives to reduce the amount of waste generated which ultimately requires processing
- Creating a welcoming pedestrian realm through streetscaping and greening of centres and corridors
- Planting 300,000 trees and shrubs between 2020-2022 to maintain natural resources and preserve green space
- Supporting more sustainable and efficient delivery of all Regional services through energy management
OPERATING BUDGET

OUR MISSION  Working together to serve our thriving communities – today and tomorrow
<table>
<thead>
<tr>
<th>Department</th>
<th>Share of Gross Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation Services</td>
<td>$479M 19%</td>
</tr>
<tr>
<td>York Region Rapid Transit Corporation</td>
<td>$31M 1.3%</td>
</tr>
<tr>
<td>Community and Health Services</td>
<td>$655M 27%</td>
</tr>
<tr>
<td>Corporate Management and Governance</td>
<td>$119M 5%</td>
</tr>
<tr>
<td>Court Services</td>
<td>$15M 0.6%</td>
</tr>
<tr>
<td>Financial Initiatives</td>
<td>$92M 4%</td>
</tr>
<tr>
<td>External Partners</td>
<td>$40M 2%</td>
</tr>
<tr>
<td>YorkNet</td>
<td>$2M 0.1%</td>
</tr>
<tr>
<td>Court Services</td>
<td>$15M 0.6%</td>
</tr>
<tr>
<td>Financial Initiatives</td>
<td>$92M 4%</td>
</tr>
<tr>
<td>External Partners</td>
<td>$40M 2%</td>
</tr>
<tr>
<td>YorkNet</td>
<td>$2M 0.1%</td>
</tr>
<tr>
<td>Corporate Management and Governance</td>
<td>$119M 5%</td>
</tr>
<tr>
<td>Community and Health Services</td>
<td>$655M 27%</td>
</tr>
<tr>
<td>Transportation Services</td>
<td>$479M 19%</td>
</tr>
<tr>
<td>York Regional Police</td>
<td>$384M 16%</td>
</tr>
<tr>
<td>Environmental Services</td>
<td>$644M 26%</td>
</tr>
<tr>
<td>Water and Wastewater</td>
<td>$556M 22%</td>
</tr>
<tr>
<td>Waste</td>
<td>$75M 3%</td>
</tr>
<tr>
<td>Forestry</td>
<td>$11M 0.5%</td>
</tr>
<tr>
<td>Energy</td>
<td>$2M 0.1%</td>
</tr>
</tbody>
</table>

DEPARTMENTAL SHARE OF GROSS EXPENDITURES
Environmental Services’ gross spending of $644M in 2020 is funded through user rates, development charges, tax levy and non-tax revenues.
DEPARTMENTAL SHARE OF NET TAX LEVY

5 cents of every tax dollar for Waste and Forestry Services

Transportation Services
- York Region Rapid Transit Corporation
  - $4M
  - 0.4%
- YorkNet
  - $2M
  - 0.2%
- Community and Health Services
  - $225M
  - 19%
- Financial Initiatives
  - $72M
  - 6%
- External Partners
  - $37M
  - 3%
- Court Services
  - ($1M)
  - 0.1%
- Corporate Management and Governance
  - $105M
  - 9%
- York Regional Police
  - $348M
  - 29%
- Waste
  - $53M
  - 4%
- Forestry
  - $10M
  - 1%
- Energy
  - $1M
  - 0.1%
- Environmental Services
  - $64M
  - 5%
## Four-Year Operating Budget Overview

<table>
<thead>
<tr>
<th></th>
<th>APPROVED</th>
<th>PROPOSED</th>
<th>OUTLOOK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td><strong>Gross Expenditures ($M):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water and Wastewater</td>
<td>525.7</td>
<td>556.1</td>
<td>574.7</td>
</tr>
<tr>
<td>Waste Management</td>
<td>73.6</td>
<td>74.9</td>
<td>77.9</td>
</tr>
<tr>
<td>Forestry</td>
<td>10.9</td>
<td>11.5</td>
<td>12.1</td>
</tr>
<tr>
<td>Climate Change Energy Conservation</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net Expenditures ($M):</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>611.7</td>
<td>643.9</td>
<td>666.2</td>
</tr>
<tr>
<td><strong>Increase/(Decrease) - Year over Year:</strong></td>
<td>2.9%</td>
<td>4.9%</td>
<td>3.7%</td>
</tr>
<tr>
<td>2019 Outlook</td>
<td>4.2%</td>
<td>6.3%</td>
<td>5.1%</td>
</tr>
<tr>
<td><strong>FTEs - Total:</strong></td>
<td>428.0</td>
<td>444.0</td>
<td>459.0</td>
</tr>
<tr>
<td>- New</td>
<td>16.0</td>
<td>15.0</td>
<td>15.0</td>
</tr>
<tr>
<td>2019 Outlook (new FTEs)</td>
<td>16.0</td>
<td>15.0</td>
<td>15.0</td>
</tr>
</tbody>
</table>
## INCREMENTAL ANNUAL BUDGET CHANGES

### $M

<table>
<thead>
<tr>
<th></th>
<th>PROPOSED 2020</th>
<th>OUTLOOK 2021</th>
<th>OUTLOOK 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opening Budget (Net)</strong></td>
<td>61.9</td>
<td>63.7</td>
<td>66.8</td>
</tr>
<tr>
<td>Status Quo</td>
<td>8.4</td>
<td>6.1</td>
<td>6.5</td>
</tr>
<tr>
<td>Revenues</td>
<td>(30.7)</td>
<td>(19.7)</td>
<td>(16.5)</td>
</tr>
<tr>
<td>Efficiencies, Reductions &amp; Other Adjustments</td>
<td>(1.9)</td>
<td>(0.1)</td>
<td>(0.3)</td>
</tr>
<tr>
<td>Debt Servicing Net of Development Charges</td>
<td>0.4</td>
<td>(0.6)</td>
<td>0.1</td>
</tr>
<tr>
<td>Fiscal Strategy</td>
<td>22.6</td>
<td>15.2</td>
<td>9.7</td>
</tr>
<tr>
<td>Maintaining Service Levels for Growth</td>
<td>2.8</td>
<td>2.0</td>
<td>2.9</td>
</tr>
<tr>
<td>Enhancement and Transformation</td>
<td>0.2</td>
<td>0.2</td>
<td>-</td>
</tr>
<tr>
<td><strong>Proposed Budget (Net)</strong></td>
<td><strong>63.7</strong></td>
<td><strong>66.8</strong></td>
<td><strong>69.3</strong></td>
</tr>
<tr>
<td><strong>Total Budget Change</strong></td>
<td>$ 1.8</td>
<td>$ 3.1</td>
<td>$ 2.5</td>
</tr>
<tr>
<td>%</td>
<td>2.91%</td>
<td>4.94%</td>
<td>3.74%</td>
</tr>
<tr>
<td><strong>Restated Outlook</strong></td>
<td>64.5</td>
<td>68.6</td>
<td>72.0</td>
</tr>
<tr>
<td><strong>Increase / (Decrease) from Outlook</strong></td>
<td>(1.3%)</td>
<td>(2.5%)</td>
<td>(3.8%)</td>
</tr>
</tbody>
</table>
SAVINGS FROM OUTLOOK WERE IDENTIFIED

Category 1: Efficiencies
- $1.1M in 2020
- $3.6M over 3 years
- Budget rationalization to better reflect expected spending
- Contract price adjustments and other efficiencies

Category 2: Service Level Adjustments
- $0.8M in 2020
- $2.5M over 3 years
- $0.6M savings by reducing contamination rate within recyclables to 20% at Earl Turcott Transfer Station
- $0.1M savings by reduction in frequency of mulching and watering planters
- $0.1M higher revenue by introducing a fee for disposal of yard waste at Bloomington facility

Category 3: Risk Tolerance and Other

Note: savings over three years are cumulative
ON TRACK TO ACHIEVE FULL COST RECOVERY BY 2021

* Estimated rate increase
WHAT DOES $556 MILLION PAY FOR IN 2020?

- **$74M** OPERATING EXPENDITURES
  - Maintenance of infrastructure, running equipment and employing highly-trained staff

- **$86M** PURCHASED SERVICES
  - Purchasing more than 90% of our water from Toronto and Peel, and treating wastewater at Duffin Creek and Peel

- **$189M** FINANCING COSTS
  - Paying the principal and interest on money borrowed to build multi-billion dollar capital program

- **$207M** CONTRIBUTION TO RESERVES
  - Reserves help to ensure money is available to repair our assets and provide services for future generations
Spending $1 on water gets you:

1 OR 600

bottle of water  bottles of tap water

ENSURING AFFORDABLE WATER
CAPITAL BUDGET

OUR MISSION

Working together to serve our thriving communities – today and tomorrow
TEN-YEAR CAPITAL IS 38% OF THE REGION’S PLAN

- Transportation Services: $3,137M (44%)
- Court Services: $1M (0.02%)
- Corporate Management: $587M (8%)
- YorkNet: $49M (0.7%)
- York Regional Police: $194M (3%)
- Community and Health Services: $332M (5%)
- York Region Rapid Transit Corporation: $90M (1.3%)

- Environmental Services
  - Water: $489M (7%)
  - Wastewater: $2,055M (29%)
  - Waste: $124M (2%)
  - Forestry: $22M (0.3%)
  - Energy: $17M (0.2%)
2020 CAPITAL BUDGET

WATER AND WASTEWATER ACCOUNTS FOR 94% OF CAPITAL SPENDING

10-YEAR CAPITAL PLAN

$2,055M
75.9%

$489M
18.1%

$124M
4.6%

$22M
0.8%

$17M
0.6%

$2.7B
## PROPOSED CAPITAL BUDGET

<table>
<thead>
<tr>
<th>Capital Budget</th>
<th>$ Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020 Capital</td>
<td>196</td>
</tr>
<tr>
<td>Ten-Year Capital Plan</td>
<td>2,707</td>
</tr>
<tr>
<td>2020 Capital Spending Authority</td>
<td>1,421</td>
</tr>
</tbody>
</table>
Environmental Services’ 2020 10-year capital budget is $2,707M, up $155M over the 2019 budget.
CAPACITY ALLOCATION — END OF 2019

YDSS Can Support Over 223,000 Persons of Growth to 2026

- Yellow: Two to Four Years of Capacity
- Teal: Five or More Years of Capacity (Subject to Close Monitoring)
- Green: Five or More Years of Capacity
- Red: Water Resources Recovery Facility
- Orange: York Durham Sewage System
These 4 key projects are about 65% of growth capital in the 10-year Plan.
## Key Projects in the 10-Year Capital Plan

<table>
<thead>
<tr>
<th>Category</th>
<th>Budget</th>
<th>Projects/Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wastewater</strong></td>
<td>$2,055M</td>
<td>Asset Management $793M, Upper York WRC $478M, West Vaughan $270M, North-East Vaughan $145M, YDSS Forcemain Twinning $101M</td>
</tr>
<tr>
<td><strong>Water</strong></td>
<td>$489M</td>
<td>Asset Management $301M, North-East Vaughan $101M, Toronto Cost Shared $32M</td>
</tr>
<tr>
<td><strong>Waste</strong></td>
<td>$124M</td>
<td>Source Separated Organics Facility $100M, Asset Management $15M</td>
</tr>
<tr>
<td><strong>Forestry</strong></td>
<td>$22M</td>
<td>Street Tree Planting $14M, Regional Forest Property Upgrade $5M, Asset Management $1M</td>
</tr>
<tr>
<td><strong>Energy</strong></td>
<td>$17M</td>
<td>Energy Retrofits $10M, Energy Efficiency $7M</td>
</tr>
</tbody>
</table>

**Asset Management** vs **Growth**

---

**Page 225**

---

33
PROACTIVE COMMITMENT TO INFRASTRUCTURE
Capital Spending Authority $1,421M
10-Year Capital Expenditures $2,707M
WRAP-UP

OUR MISSION
Working together to serve our thriving communities – today and tomorrow
TOP INITIATIVES IN BUDGET ALIGNED WITH 2019 TO 2023 STRATEGIC PLAN:

- Strive for 100% of drinking water samples to meet Ontario Drinking Water Standards
- Work towards 100% of wastewater to receive treatment
- Divert more than 90% of residential solid waste from landfill
- Plant 70,000 trees and shrubs annually through the Regional Greening Strategy
- Strive to achieve 100% of ENV assets with a condition assessment of fair or better condition
- Reduce residential water consumption rate to 190 litres per capita per day by 2021
- Continue to reduce GHG emissions from 67.4 kg per capita across all regional operations
## Multi-Year Budget Overview

### Operating Budget

<table>
<thead>
<tr>
<th></th>
<th>Approved 2019</th>
<th>Proposed 2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Expenditures</td>
<td>611.7</td>
<td>643.9</td>
<td>666.2</td>
<td>696.0</td>
</tr>
<tr>
<td>Non-Tax Revenues</td>
<td>(549.8)</td>
<td>(580.2)</td>
<td>(599.4)</td>
<td>(626.7)</td>
</tr>
<tr>
<td>Net Tax Levy</td>
<td>61.9</td>
<td>63.7</td>
<td>66.8</td>
<td>69.3</td>
</tr>
<tr>
<td>FTEs - Total</td>
<td>428.0</td>
<td>444.0</td>
<td>459.0</td>
<td>474.0</td>
</tr>
<tr>
<td>FTEs - New</td>
<td>16.0</td>
<td>15.0</td>
<td>15.0</td>
<td>15.0</td>
</tr>
</tbody>
</table>

### Capital Budget

- **2020 Capital Expenditures ($M)**: 196
- **Total Capital Spending Authority ($M)**: 1421
DELIVERING VALUE FOR MONEY

• Operating and maintaining over $6.4 billion in assets
• Delivering 118 billion litres of clean and safe drinking water
• Managing and protecting over 41,000 hectares of woodlands
• Proactively managing over 140 capital projects
• Managing 365,000 tonnes of waste
• Harvesting solar energy through 21 long-term contracts

Services delivered for less than $5 a day
1. Committee of the Whole recommend the budget as submitted for Environmental Services as follows:

   a. The 2020 operating budget and the 2021 to 2022 operating outlook, as summarized in Attachment 1.

   b. The savings initiatives as summarized in Attachment 2.

   c. The 2020 capital expenditures and the 2020 Capital Spending Authority, as summarized in Attachment 3.

2. The recommended budget be consolidated by the Commissioner of Finance and Regional Treasurer for consideration by Council on December 19, 2019.