



# Draft **BUDGET 2020**

An affordable approach for  
responsible growth, mobility  
and housing

Standing Committee on Environmental  
Protection, Water and Waste  
Management –Tax Supported

Tabled November 6, 2019





## Table of Contents

### Standing Committee on Environmental Protection, Water and Waste Management - Tax Supported

#### Table of Contents

Infrastructure Services .....	1
Service Area Summary .....	1
Operating Resource Requirement .....	3
User Fees .....	4
Resiliency and Natural Systems Policy.....	5
Service Area Summary .....	5
Operating Resource Requirement .....	7
Solid Waste Services .....	8
Service Area Summary .....	8
Operating Resource Requirement .....	9
User Fees .....	10
Forestry Services .....	11
Service Area Summary .....	11
Operating Resource Requirement .....	12
User Fees .....	13
Capital Funding Summary.....	14
Operating and Capital Supplemental Information .....	15
Infrastructure Services .....	15
Analysis .....	15
Explanatory Notes.....	17
Resiliency and Natural Systems Policy.....	19
Analysis .....	19
Explanatory Notes.....	20
Solid Waste Services .....	21

Analysis .....	21
Explanatory Notes .....	23
Forestry Services .....	24
Analysis .....	24
Explanatory Notes .....	25
Capital Budget .....	26
Project Details .....	26
Environment Services .....	27
Solid Waste Services .....	30
4 Year Forecast .....	38
Works-In-Progress Listing .....	40

# **Planning, Infrastructure and Economic Development Department**

## **2020 Service Area Summary - Infrastructure Services**

Infrastructure Services (IS) is part of the Planning, Infrastructure and Economic Development (PIED) Department, a department that champions the city-building priorities – from planning and delivering growth opportunities and infrastructure, to managing City assets, to fostering economic prosperity.

### **Vision**

To build a better Ottawa for all to enjoy, today and into the future.

### **Mission**

To implement city-building priorities from planning and delivering infrastructure projects, to managing infrastructure assets and investments.

### **Programs/Services Offered**

The following are services offered by Infrastructure Services:

#### **Asset Management**

Administer and optimize the lifecycle of municipal infrastructure valued at over \$42 billion, maintain asset inventory, undertake condition and performance assessments, develop risk-based renewal strategies and define investment needs. Lead water resource master planning, source water protection and capital program definition. Manage the City's Comprehensive Asset Management (CAM) Program.

#### **Quality Management**

Provide overall quality management on infrastructure projects in terms of design guidelines and construction standards, material quality and project delivery practices.

### **Design and Construction**

Manage the design and construction of new and renewal of existing municipal infrastructure, buildings and parks. This is approximately \$500 million in capital projects annually.

City of Ottawa  
 Planning, Infrastructure & Economic Development Department  
 Infrastructure Services - Operating Resource Requirement  
 In Thousands (\$000)

	2018	2019		2020	\$ Change over 2019 Budget
	Actual	Forecast	Budget	Estimate	
<b>Expenditures by Program</b>					
Director's Office	575	673	623	641	18
Quality Management	2,639	2,936	3,244	4,231	987
Special Projects	703	1,224	177	180	3
Design & Construction - Facilities	4,764	5,422	5,116	5,219	103
Design & Construction - Municipal	7,812	7,988	8,358	8,581	223
Asset Management	12,312	12,636	12,802	13,028	226
<b>Gross Expenditure</b>	<b>28,805</b>	<b>30,879</b>	<b>30,320</b>	<b>31,880</b>	<b>1,560</b>
Recoveries & Allocations	-22,527	-24,065	-23,406	-24,721	-1,315
Revenue	-15	-16	-16	-16	0
<b>Net Requirement</b>	<b>6,263</b>	<b>6,798</b>	<b>6,898</b>	<b>7,143</b>	<b>245</b>
<b>Expenditures by Type</b>					
Salaries, Wages & Benefits	24,360	26,547	26,089	26,949	860
Overtime	198	249	235	235	0
Material & Services	3,769	3,833	3,828	4,528	700
Transfers/Grants/Financial Charges	0	0	0	0	0
Fleet Costs	97	151	97	97	0
Program Facility Costs	0	0	0	0	0
Other Internal Costs	381	99	71	71	0
<b>Gross Expenditures</b>	<b>28,805</b>	<b>30,879</b>	<b>30,320</b>	<b>31,880</b>	<b>1,560</b>
Recoveries & Allocations	-22,527	-24,065	-23,406	-24,721	-1,315
<b>Net Expenditure</b>	<b>6,278</b>	<b>6,814</b>	<b>6,914</b>	<b>7,159</b>	<b>245</b>
<b>Revenues By Type</b>					
Federal	0	0	0	0	0
Provincial	0	0	0	0	0
Municipal	0	0	0	0	0
Own Funds	0	0	0	0	0
Fees and Services	-15	-16	-16	-16	0
Fines	0	0	0	0	0
Other	0	0	0	0	0
<b>Total Revenue</b>	<b>-15</b>	<b>-16</b>	<b>-16</b>	<b>-16</b>	<b>0</b>
<b>Net Requirement</b>	<b>6,263</b>	<b>6,798</b>	<b>6,898</b>	<b>7,143</b>	<b>245</b>
<b>Full Time Equivalents</b>			<b>212.67</b>	<b>214.67</b>	<b>2.00</b>

City of Ottawa  
 Planning, Infrastructure & Economic Development Department  
 Infrastructure Services - User Fees

	2018 Rate \$	2019 Rate \$	2020 Rate \$	% Change Over 2019	% Change Over 2018	Effective Date	2020 Revenue (\$000)
<b>Road Cut Degradation Fees</b>							
Road Cut Pavement Degradation fees (per square meter)							
2 years or less	36.20	37.00	37.90	2.4%	4.7%	01-Jan-20	
2 to 4 years	30.10	30.85	31.60	2.4%	5.0%	01-Jan-20	
4 to 7 years	24.20	24.80	25.40	2.4%	5.0%	01-Jan-20	
7 to 10 years	15.10	15.50	15.87	2.4%	5.1%	01-Jan-20	
10 years or more	6.00	6.15	6.30	2.4%	5.0%	01-Jan-20	
<b>Guideline Publications</b>							
Guideline Publications (CD only)	80.00	82.00	84.00	2.4%	5.0%	01-Jan-20	
<b>Accident Inspections</b>							
3 hour minimum (hourly rate)	160.00	164.00	168.00	2.4%	5.0%	01-Jan-20	
Any third party charges (cost recovery)	100%	100%	100%	0.0%	0.0%	01-Jan-20	
<b>Transfer of Review</b>							
Transfer of Review Fees are per the Ministry of Environment and Climate Change							
<b>Administration and Overhead Charge</b>							
Applied to the overall cost recovery for any works undertaken for third parties not covered under other agreements, such as developers, school boards, universities or general parties	15%	15%	15%	0.0%	0.0%	01-Jan-20	
<b>Total Departmental</b>							<b>0</b>



## **Planning, Infrastructure and Economic Development Department 2020 Service Area Summary - Natural Systems**

Economic Development and Long-Range Planning – Natural Systems is part of the Planning, Infrastructure and Economic Development (PIED) Department, a department that champions the city-building priorities from planning and delivering growth activities and infrastructure, to managing our assets and investments, to fostering economic prosperity. This branch reports through the Standing Committee on Environmental Protection, Water and Waste Management.

Natural systems develops policies and delivers programs to support Ottawa’s natural environment, urban forest and rural area. Centre of expertise for natural systems, providing guidance to promote sustainable development, fostering a healthy system of natural areas, greenspaces and arable lands. Leverages partnerships, public outreach and stewardship to implement the city’s environmental goals.

### **Programs/Services Offered**

- Oversee Urban Forest Management Plan
- Develop and implements policies to support and enhance the City’s natural areas
- Administer Environmental and Rural Clean Water Grant Programs
- Events, including Wildlife Speaker Series
- Perform development and infrastructure review (implement city’s environmental policies)
- Identify natural lands for acquisitions by City

## **Planning, Infrastructure and Economic Development 2020 Service Area Summary –Resiliency and Climate Change**

Economic Development and Long-Range Planning – Resiliency and Climate Change unit is part of the Planning, Infrastructure and Economic Development (PIED) Department, a department that champions the city-building priorities from planning and delivering growth activities and infrastructure, to managing our assets and investments, to fostering economic prosperity. This unit reports through the Standing Committee on Environmental Protection, Water and Waste Management and is responsible for developing and coordinating strategic policies, programs and plans to reduce greenhouse gas emissions and build resiliency to climate change in Ottawa. As the City's centre of expertise for resiliency and climate change, the team also provides technical expertise on corporate projects and supports community initiatives.

### **Programs/Services Offered**

Resiliency and Climate Change includes;

- Air Quality and Climate Change Update
- Energy Evolution
- Climate Resiliency Strategy (Climate Projections, Vulnerability Assessment, and Climate Resiliency Plan)
- Annual Greenhouse Gas Inventory

City of Ottawa  
 Planning, Infrastructure & Economic Development Department  
 Resiliency and Natural Systems Policy - Operating Resource Requirement  
 In Thousands (\$000)

	2018	2019		2020	\$ Change over 2019 Budget
	Actual	Forecast	Budget	Estimate	
<b>Expenditures by Program</b>					
Natural Systems	1,230	948	948	978	30
Resiliency & Climate Change	181	827	877	897	20
<b>Gross Expenditure</b>	<b>1,411</b>	<b>1,775</b>	<b>1,825</b>	<b>1,875</b>	<b>50</b>
Recoveries & Allocations	-13	0	0	0	0
Revenue	0	0	0	0	0
<b>Net Requirement</b>	<b>1,398</b>	<b>1,775</b>	<b>1,825</b>	<b>1,875</b>	<b>50</b>
<b>Expenditures by Type</b>					
Salaries, Wages & Benefits	1,303	1,456	1,506	1,556	50
Overtime	8	11	11	11	0
Material & Services	38	258	258	258	0
Transfers/Grants/Financial Charges	57	50	50	50	0
Fleet Costs	0	0	0	0	0
Program Facility Costs	0	0	0	0	0
Other Internal Costs	5	0	0	0	0
<b>Gross Expenditures</b>	<b>1,411</b>	<b>1,775</b>	<b>1,825</b>	<b>1,875</b>	<b>50</b>
Recoveries & Allocations	-13	0	0	0	0
<b>Net Expenditure</b>	<b>1,398</b>	<b>1,775</b>	<b>1,825</b>	<b>1,875</b>	<b>50</b>
<b>Revenues By Type</b>					
Federal	0	0	0	0	0
Provincial	0	0	0	0	0
Municipal	0	0	0	0	0
Own Funds	0	0	0	0	0
Fees and Services	0	0	0	0	0
Fines	0	0	0	0	0
Other	0	0	0	0	0
<b>Total Revenue</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Net Requirement</b>	<b>1,398</b>	<b>1,775</b>	<b>1,825</b>	<b>1,875</b>	<b>50</b>
<b>Full Time Equivalents</b>			<b>12.00</b>	<b>12.00</b>	<b>0.00</b>

## **Public Works & Environmental Services Department 2020 Service Area Summary - Solid Waste Services**

Solid Waste Services is responsible for the development, management, and environmentally sound operation of the residential solid waste management system for the City.

This includes:

- Long-term strategic planning of programs and facilities to ensure alignment with future growth and legislative requirements such as: the waste management master plan, service level reviews and technology and environmental assessments
- Providing services and facilities for the collection, diversion and disposal of residential waste, organics, recycling, and household hazardous waste
- Comprehensive management, operation and maintenance of City-owned landfills

### **Programs/Services Offered**

- Curbside residential waste collection and disposal
- Multi-residential waste collection and disposal
- Waste collection at City facilities
- Residential waste diversion programs (Green Bin program, Blue/Black Box Program, Household Hazardous Waste depots etc.)
- Landfill operations management
- Yellow Bag program
- Biosolid Land Application program
- Graffiti removal from City assets
- Public space waste and recycling collection and processing

City of Ottawa  
Public Works and Environmental Services Department  
Solid Waste Services - Operating Resource Requirement  
In Thousands (\$000)

	2018	2019		2020	\$ Change over 2019 Budget
	Actual	Forecast	Budget	Estimate	
<b>Expenditures by Program</b>					
Director's Office	751	469	492	495	3
Diversion/Recycling	42,774	44,409	43,911	48,379	4,468
Graffiti Management	889	942	819	843	24
Soil Management	436	759	650	650	0
Landfill Operations/Disposal	9,801	9,447	8,181	8,373	192
Garbage Collection	16,125	17,014	17,175	20,925	3,750
Long Term Planning/Other	141	219	316	619	303
Solid Waste Non Departmental	5,747	5,747	5,747	5,747	0
<b>Gross Expenditure</b>	<b>76,664</b>	<b>79,006</b>	<b>77,291</b>	<b>86,031</b>	<b>8,740</b>
Recoveries & Allocations	-3,382	-3,607	-2,757	-2,757	0
Revenue	-50,952	-51,770	-51,920	-58,080	-6,160
<b>Net Requirement</b>	<b>22,330</b>	<b>23,629</b>	<b>22,614</b>	<b>25,194</b>	<b>2,580</b>
<b>Expenditures by Type</b>					
Salaries, Wages & Benefits	12,506	13,820	13,409	14,119	710
Overtime	1,286	1,297	647	662	15
Material & Services	46,808	47,382	48,106	55,781	7,675
Transfers/Grants/Financial Charges	5,033	5,028	5,326	5,326	0
Fleet Costs	9,364	10,294	8,293	8,633	340
Program Facility Costs	0	0	0	0	0
Other Internal Costs	1,667	1,185	1,510	1,510	0
<b>Gross Expenditures</b>	<b>76,664</b>	<b>79,006</b>	<b>77,291</b>	<b>86,031</b>	<b>8,740</b>
Recoveries & Allocations	-3,382	-3,607	-2,757	-2,757	0
<b>Net Expenditure</b>	<b>73,282</b>	<b>75,399</b>	<b>74,534</b>	<b>83,274</b>	<b>8,740</b>
<b>Revenues By Type</b>					
Federal	0	0	0	0	0
Provincial	-6,497	-5,824	-5,824	-5,824	0
Municipal	0	0	0	0	0
Own Funds	0	0	0	0	0
Fees and Services	-44,455	-45,946	-46,096	-52,256	-6,160
Fines	0	0	0	0	0
Other	0	0	0	0	0
<b>Total Revenue</b>	<b>-50,952</b>	<b>-51,770</b>	<b>-51,920</b>	<b>-58,080</b>	<b>-6,160</b>
<b>Net Requirement</b>	<b>22,330</b>	<b>23,629</b>	<b>22,614</b>	<b>25,194</b>	<b>2,580</b>
<b>Full Time Equivalents</b>			<b>69.40</b>	<b>73.40</b>	<b>4.00</b>

City of Ottawa  
Public Works and Environmental Services Department  
Solid Waste Services - User Fees

	2018 Rate \$	2019 Rate \$	2020 Rate \$	% Change Over 2019	% Change Over 2018	Effective Date	2020 Revenue (\$000)
<b>Solid Waste - User Fees</b>							-3,860
Single Family Household	86.00	88.00	96.00	9.1%	11.6%	01-Jan-20	
Multi Residential Household	42.00	43.00	56.50	31.4%	34.5%	01-Jan-20	
Yellow Bag per bag fee	3.75	3.90	4.00	2.6%	6.7%	01-Jan-20	
<b>Landfill Operations - Tipping Fees</b>							-10
<b>Waste Materials</b>							
Garbage <=100 kg (minimum)	11.00	11.20	11.40	1.8%	3.6%	01-Feb-20	
Garbage >100 kg (per tonne)	110.00	112.00	114.00	1.8%	3.6%	01-Feb-20	
Mixed garbage & recyclable material <=100 kg (minimum)	22.00	22.40	22.80	1.8%	3.6%	01-Feb-20	
Mixed garbage & recyclable material >100 kg (per tonne)	220.00	224.00	228.00	1.8%	3.6%	01-Feb-20	
Asbestos <=250 kg per load flat rate (minimum)	121.00	123.00	126.00	2.4%	4.1%	01-Feb-20	
Asbestos >250 kg (per tonne)	484.00	494.00	504.00	2.0%	4.1%	01-Feb-20	
<b>Diversion Program - Clean Loads</b>							
Metal /Tires	Free	Free	Free	N/A	N/A		
E-waste	Free	Free	Free	N/A	N/A		
Blue Box Material	Free	Free	Free	N/A	N/A		
Cardboard <=100 kg (minimum)	5.30	5.40	5.50	1.9%	3.8%	01-Feb-20	
Cardboard >100 kg (per tonne)	53.00	54.00	55.00	1.9%	3.8%	01-Feb-20	
Leaf and Yard Waste under 10 cm in diameter <=100 kg (minimum)	3.75	3.80	3.85	1.3%	2.7%	01-Feb-20	
Leaf and Yard Waste >100 kg (per tonne)	37.50	38.00	38.50	1.3%	2.7%	01-Feb-20	
Soil/Fill <=200 kg (minimum) (Top soil, sand, sod, asphalt, masonry, concrete without rebar)	5.50	3.20	5.60	75.0%	1.8%	01-Feb-20	
Soil/Fill >200 kg (per tonne) (Top soil, sand, sod, asphalt, masonry, concrete without rebar)	27.50	27.50	28.00	1.8%	1.8%	01-Feb-20	
Woodchips <=200 kg (minimum)	5.50	5.60	5.70	1.8%	3.6%	01-Feb-20	
Woodchips >200 kg (per tonne)	27.50	28.00	28.50	1.8%	3.6%	01-Feb-20	
<b>Retail Materials Program</b>							
Municipal Potting Soil <=200 kg (minimum)	8.00	8.20	8.40	2.4%	5.0%	01-Feb-20	
Municipal Potting Soil >200 kg (per tonne)	40.00	41.00	42.00	2.4%	5.0%	01-Feb-20	
<b>Total Departmental</b>							<b>-3,870</b>

## **Public Works & Environmental Services Department**

### **2020 Service Area Summary - Forestry Services**

Forestry Services manages all aspects of the City's 10,000 hectares of urban and rural forests including 346,000 street and park trees in order to preserve, protect, maintain and enhance forest cover in the Nation's Capital.

#### **Programs/Services Offered**

- Tree and forest maintenance, which includes pruning, removal, stumping, watering and fertilizing activities
- Invasive pest management (ex.: Emerald Ash Borer)
- Infill Tree Conservation program
- Tree nursery operations, which includes tree planting, watering and establishment pruning activities
- Trees in Trust program
- Streetscape, park, and facility tree planting
- Community planting projects
- Commemorative Tree program
- Green Acres - Ottawa's rural reforestation program
- Schoolyard Tree Planting Grant program

City of Ottawa  
Public Works & Environmental Services Department  
Forestry Services - Operating Resource Requirement  
In Thousands (\$000)

	2018	2019		2020	\$ Change over 2019 Budget
	Actual	Forecast	Budget	Estimate	
<b>Expenditures by Program</b>					
Forestry Services	18,478	18,045	18,745	18,990	245
<b>Gross Expenditure</b>	<b>18,478</b>	<b>18,045</b>	<b>18,745</b>	<b>18,990</b>	<b>245</b>
Recoveries & Allocations	-54	-35	0	0	0
Revenue	-291	-255	-45	-45	0
<b>Net Requirement</b>	<b>18,133</b>	<b>17,755</b>	<b>18,700</b>	<b>18,945</b>	<b>245</b>
<b>Expenditures by Type</b>					
Salaries, Wages & Benefits	7,583	8,148	8,074	8,264	190
Overtime	363	175	172	177	5
Material & Services	9,065	8,375	9,196	9,196	0
Transfers/Grants/Financial Charges	5	5	0	0	0
Fleet Costs	1,282	1,248	1,282	1,332	50
Program Facility Costs	0	0	0	0	0
Other Internal Costs	180	94	21	21	0
<b>Gross Expenditures</b>	<b>18,478</b>	<b>18,045</b>	<b>18,745</b>	<b>18,990</b>	<b>245</b>
Recoveries & Allocations	-54	-35	0	0	0
<b>Net Expenditure</b>	<b>18,424</b>	<b>18,010</b>	<b>18,745</b>	<b>18,990</b>	<b>245</b>
<b>Revenues By Type</b>					
Federal	0	0	0	0	0
Provincial	-148	0	0	0	0
Municipal	0	0	0	0	0
Own Funds	0	0	0	0	0
Fees and Services	-143	-255	-45	-45	0
Fines	0	0	0	0	0
Other	0	0	0	0	0
<b>Total Revenue</b>	<b>-291</b>	<b>-255</b>	<b>-45</b>	<b>-45</b>	<b>0</b>
<b>Net Requirement</b>	<b>18,133</b>	<b>17,755</b>	<b>18,700</b>	<b>18,945</b>	<b>245</b>
<b>Full Time Equivalents</b>			<b>82.32</b>	<b>82.32</b>	<b>0.00</b>



**City of Ottawa**  
**Public Works & Environmental Services Department**  
**Forestry Services - User Fees**

	2018 Rate \$	2019 Rate \$	2020 Rate \$	% Change Over 2019	% Change Over 2018	Effective Date	2020 Revenue (\$000)
Tree Planting Deposit - Low Rise Housing	700.00	700.00	700.00	0.0%	0.0%		
Establish a permit fee for Distinctive Tree Bylaw 2009-200 part 3 - Small Property Component -- For properties one hectare or less in size, and condominium and multi-residential properties of all sizes, if a landowner wants to remove a tree that is greater than 50 centimetres (20 inches) in diameter, they must obtain a Distinctive Tree Permit from the City.	100.00	100.00	100.00	0.0%	0.0%		
Administration and Overhead charge will be applied to the overall cost recovery for any works or accident recoveries undertaken by Forestry Services on behalf of Federal/Provincial governments, Hydro Ottawa, school boards, universities/colleges, municipalities, general persons/parties and developers.	15%	15%	15%	0.0%	0.0%		
<b>Total Departmental</b>							<b>0</b>

**City Of Ottawa**  
**2020 Draft Capital Budget**  
**Standing Committee on Environmental Protection, Water and Waste Management - Tax**  
**Funding Summary**  
**In Thousands \$(000's)**

Project Description	Revenues	Gas Tax	Tax Supported/ Dedicated	Develop. Charges	Tax Supported/ Dedicated Debt	Grand Total
<b>Environment</b>						
Renewal of City Assets						
908880 Energy Evolution	-	-	70	-	-	70
<b>Renewal of City Assets Total</b>	-	-	<b>70</b>	-	-	<b>70</b>
Service Enhancements						
909836 Energy Mngmnt & Invest. Strategy 2020	-	-	3,000	-	-	3,000
909865 2020 Natural Area Acquisitions (Urban)	-	-	-	-	2,000	2,000
<b>Service Enhancements Total</b>	-	-	<b>3,000</b>	-	<b>2,000</b>	<b>5,000</b>
<b>Environment Total</b>	-	-	<b>3,070</b>	-	<b>2,000</b>	<b>5,070</b>
<b>Solid Waste</b>						
Renewal of City Assets						
907611 Trail Road Stormwater Ponds and Ditches	-	-	300	-	-	300
908013 Trail Road Scalehouse Rehabilitation	-	-	100	-	-	100
909399 Trail Road Landfill Cap Repair	-	-	1,000	-	-	1,000
909430 Nepean Landfill Cap Repair	-	-	450	-	-	450
<b>Renewal of City Assets Total</b>	-	-	<b>1,850</b>	-	-	<b>1,850</b>
Growth						
909742 Solid Waste Fleet Growth	-	-	100	-	-	100
<b>Growth Total</b>	-	-	<b>100</b>	-	-	<b>100</b>
Regulatory						
907238 Landfill Disposal Stage 2 Capping	-	-	3,300	-	-	3,300
907353 Trail Rd Gas Collection System Expansion	-	-	1,000	-	-	1,000
907659 Leachate Recirculation	-	-	250	-	-	250
907816 Groundwater Management	-	-	100	-	-	100
<b>Regulatory Total</b>	-	-	<b>4,650</b>	-	-	<b>4,650</b>
<b>Solid Waste Total</b>	-	-	<b>6,600</b>	-	-	<b>6,600</b>
<b>Grand Total</b>	-	-	<b>9,670</b>	-	<b>2,000</b>	<b>11,670</b>

City of Ottawa  
 Planning, Infrastructure & Economic Development Department  
 Infrastructure Services - Operating Resource Requirement Analysis  
 In Thousands (\$000)

	2019 Baseline			2020 Adjustments			2020	\$ Change over 2019 Budget
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	User Fees & Revenues	Estimate	
<b>Expenditures by Program</b>								
Director's Office	673	623	0	18	0	0	641	18
Quality Management	2,936	3,244	0	762	225	0	4,231	987
Special Projects	1,224	177	0	3	0	0	180	3
Design & Construction - Facilities	5,422	5,116	0	103	0	0	5,219	103
Design & Construction - Municipal	7,988	8,358	0	223	0	0	8,581	223
Asset Management	12,636	12,802	0	226	0	0	13,028	226
<b>Gross Expenditure</b>	<b>30,879</b>	<b>30,320</b>	<b>0</b>	<b>1,335</b>	<b>225</b>	<b>0</b>	<b>31,880</b>	<b>1,560</b>
Recoveries & Allocations	-24,065	-23,406	0	-1,090	-225	0	-24,721	-1,315
Revenue	-16	-16	0	0	0	0	-16	0
<b>Net Requirement</b>	<b>6,798</b>	<b>6,898</b>	<b>0</b>	<b>245</b>	<b>0</b>	<b>0</b>	<b>7,143</b>	<b>245</b>
<b>Expenditures by Type</b>								
Salaries, Wages & Benefits	26,547	26,089	0	635	225	0	26,949	860
Overtime	249	235	0	0	0	0	235	0
Material & Services	3,833	3,828	0	700	0	0	4,528	700
Transfers/Grants/Financial Charge	0	0	0	0	0	0	0	0
Fleet Costs	151	97	0	0	0	0	97	0
Program Facility Costs	0	0	0	0	0	0	0	0
Other Internal Costs	99	71	0	0	0	0	71	0
<b>Gross Expenditures</b>	<b>30,879</b>	<b>30,320</b>	<b>0</b>	<b>1,335</b>	<b>225</b>	<b>0</b>	<b>31,880</b>	<b>1,560</b>
Recoveries & Allocations	-24,065	-23,406	0	-1,090	-225	0	-24,721	-1,315
<b>Net Expenditure</b>	<b>6,814</b>	<b>6,914</b>	<b>0</b>	<b>245</b>	<b>0</b>	<b>0</b>	<b>7,159</b>	<b>245</b>
<b>Percent of 2019 Net Expenditure Budget</b>			<b>0.0%</b>	<b>3.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>3.5%</b>	

City of Ottawa  
 Planning, Infrastructure & Economic Development Department  
 Infrastructure Services - Operating Resource Requirement Analysis  
 In Thousands (\$000)

	2019 Baseline			2020 Adjustments			2020	\$ Change over 2019 Budget
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	User Fees & Revenues	Estimate	
<b>Revenues By Type</b>								
Federal	0	0	0	0	0	0	0	0
Provincial	0	0	0	0	0	0	0	0
Municipal	0	0	0	0	0	0	0	0
Own Funds	0	0	0	0	0	0	0	0
Fees and Services	-16	-16	0	0	0	0	-16	0
Fines	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
<b>Total Revenue</b>	<b>-16</b>	<b>-16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-16</b>	<b>0</b>
<b>Percent of 2019 Revenue Budget</b>			<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	
<b>Net Requirement</b>	<b>6,798</b>	<b>6,898</b>	<b>0</b>	<b>245</b>	<b>0</b>	<b>0</b>	<b>7,143</b>	<b>245</b>
<b>Percent of 2019 Net Requirement Budget</b>			<b>0.0%</b>	<b>3.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>3.6%</b>	
<b>Full Time Equivalents (FTE's)</b>		212.67	0.00	0.00	2.00	0.00	<b>214.67</b>	<b>2.00</b>
<b>Percent of 2019 FTE's</b>			<b>0.0%</b>	<b>0.0%</b>	<b>0.9%</b>	<b>0.0%</b>	<b>0.9%</b>	

City of Ottawa  
 Planning, Infrastructure & Economic Development Department  
 Infrastructure Services - Operating Resource Requirement Explanatory Notes  
 In Thousands (\$000)

2019 Forecast vs. Budget Variance Explanation	Surplus / (Deficit)		
	Expense	Revenue	Net
Expenditure savings mainly due to vacancies.	100	0	100
<b>Total Surplus / (Deficit)</b>	<b>100</b>	<b>0</b>	<b>100</b>

  

2020 Pressure Category / Explanation	Increase / (Decrease)			
	Expense	Revenue	Net 2020 Changes	FTE Impact
<b>Maintain Services</b>				
All programs include an adjustment for potential 2020 cost of living, increments and benefit adjustments.	635	0	635	0.00
All programs include an adjustment for potential 2020 cost of living, increments and benefit adjustments - offset by recoveries and allocations.	-390	0	-390	0.00
viSion is the suite of tools, launched in 2018, IS uses to manage and track over \$500 million annually in capital construction projects. Funding is required for the annual licenses for the supporting systems, maintenance support, and development of enhanced functionality.	700	0	700	0.00
viSion is the suite of tools, launched in 2018, IS uses to manage and track over \$500 million annually in capital construction projects. Funding is required for the annual licenses for the supporting systems, maintenance support, and development of enhanced functionality. Offset by recoveries and allocations.	-700	0	-700	0.00
<b>Total Maintain Services</b>	<b>245</b>	<b>0</b>	<b>245</b>	<b>0.00</b>

City of Ottawa  
 Planning, Infrastructure & Economic Development Department  
 Infrastructure Services - Operating Resource Requirement Explanatory Notes  
 In Thousands (\$000)

2020 Pressure Category / Explanation	Increase / (Decrease)			
	Expense	Revenue	Net 2020 Changes	FTE Impact
<b>Growth</b>				
Two positions are required to support the increased focus on quality related to project compliance, performance metrics, monitoring and reporting on capital projects, and providing operational and technical support to the Service Area.	225	0	225	2.00
Two positions are required to support the increased focus on quality related to project compliance, performance metrics, monitoring and reporting on capital projects, and providing operational and technical support to the Service Area. Offset by recoveries and allocations.	-225	0	-225	0.00
<b>Total Growth</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2.00</b>
<b>User Fees &amp; Revenues</b>				
See following user fee schedule for details on the specific rates.	0	0	0	0.00
<b>Total User Fees &amp; Revenues</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00</b>
<b>Total Budget Changes</b>	<b>245</b>	<b>0</b>	<b>245</b>	<b>2.00</b>

City of Ottawa  
 Planning, Infrastructure & Economic Development Department  
 Resiliency and Natural Systems Policy - Operating Resource Requirement Analysis  
 In Thousands (\$000)

	2019 Baseline			2020 Adjustments			2020	\$ Change over 2019 Budget
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	User Fees & Revenues	Estimate	
<b>Expenditures by Program</b>								
Natural Systems	948	948	0	30	0	0	978	30
Resiliency & Climate Change	827	877	0	20	0	0	897	20
<b>Gross Expenditure</b>	<b>1,775</b>	<b>1,825</b>	<b>0</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>1,875</b>	<b>50</b>
Recoveries & Allocations	0	0	0	0	0	0	0	0
Revenue	0	0	0	0	0	0	0	0
<b>Net Requirement</b>	<b>1,775</b>	<b>1,825</b>	<b>0</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>1,875</b>	<b>50</b>
<b>Expenditures by Type</b>								
Salaries, Wages & Benefits	1,456	1,506	0	50	0	0	1,556	50
Overtime	11	11	0	0	0	0	11	0
Material & Services	258	258	0	0	0	0	258	0
Transfers/Grants/Financial Charges	50	50	0	0	0	0	50	0
Fleet Costs	0	0	0	0	0	0	0	0
Program Facility Costs	0	0	0	0	0	0	0	0
Other Internal Costs	0	0	0	0	0	0	0	0
<b>Gross Expenditures</b>	<b>1,775</b>	<b>1,825</b>	<b>0</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>1,875</b>	<b>50</b>
Recoveries & Allocations	0	0	0	0	0	0	0	0
<b>Net Expenditure</b>	<b>1,775</b>	<b>1,825</b>	<b>0</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>1,875</b>	<b>50</b>
<b>Percent of 2019 Net Expenditure Budget</b>			<b>0.0%</b>	<b>2.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>2.7%</b>	
<b>Revenues By Type</b>								
Federal	0	0	0	0	0	0	0	0
Provincial	0	0	0	0	0	0	0	0
Municipal	0	0	0	0	0	0	0	0
Own Funds	0	0	0	0	0	0	0	0
Fees and Services	0	0	0	0	0	0	0	0
Fines	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
<b>Total Revenue</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Percent of 2019 Revenue Budget</b>			<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	
<b>Net Requirement</b>	<b>1,775</b>	<b>1,825</b>	<b>0</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>1,875</b>	<b>50</b>
<b>Percent of 2019 Net Requirement Budget</b>			<b>0.0%</b>	<b>2.7%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>2.7%</b>	
<b>Full Time Equivalents (FTE's)</b>		12.00	0.00	0.00	0.00	0.00	<b>12.00</b>	<b>0.00</b>
<b>Percent of 2019 FTE's</b>			<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	

City of Ottawa  
 Planning, Infrastructure & Economic Development Department  
 Resiliency and Natural Systems Policy - Operating Resource Requirement Explanatory Notes  
 In Thousands (\$000)

2019 Forecast vs. Budget Variance Explanation	Surplus / (Deficit)		
	Expense	Revenue	Net
Expenditure savings mainly due to vacancies.	50	0	50
<b>Total Surplus / (Deficit)</b>	<b>50</b>	<b>0</b>	<b>50</b>

  

2020 Pressure Category / Explanation	Increase / (Decrease)			
	Expense	Revenue	Net 2020 Changes	FTE Impact
<b>Maintain Services</b> All programs include an adjustment for potential 2020 cost of living, increments and benefit adjustments.	50	0	50	0.00
<b>Total Maintain Services</b>	<b>50</b>	<b>0</b>	<b>50</b>	<b>0.00</b>
<b>Total Budget Changes</b>	<b>50</b>	<b>0</b>	<b>50</b>	<b>0.00</b>



City of Ottawa  
Public Works and Environmental Services Department  
Solid Waste Services - Operating Resource Requirement Analysis  
In Thousands (\$000)

	2019 Baseline			2020 Adjustments			2020	\$ Change over 2019 Budget
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	User Fees & Revenues	Estimate	
<b>Expenditures by Program</b>								
Director's Office	469	492	0	3	0	0	495	3
Diversion/Recycling	44,409	43,911	0	3,563	905	0	48,379	4,468
Graffiti Management	942	819	0	24	0	0	843	24
Soil Management	759	650	0	0	0	0	650	0
Landfill Operations/Disposal	9,447	8,181	0	192	0	0	8,373	192
Garbage Collection	17,014	17,175	0	3,135	615	0	20,925	3,750
Long Term Planning/Other	219	316	0	3	300	0	619	303
Solid Waste Non Departmental	5,747	5,747	0	0	0	0	5,747	0
<b>Gross Expenditure</b>	<b>79,006</b>	<b>77,291</b>	<b>0</b>	<b>6,920</b>	<b>1,820</b>	<b>0</b>	<b>86,031</b>	<b>8,740</b>
Recoveries & Allocations	-3,607	-2,757	0	0	0	0	-2,757	0
Revenue	-51,770	-51,920	0	0	-375	-5,785	-58,080	-6,160
<b>Net Requirement</b>	<b>23,629</b>	<b>22,614</b>	<b>0</b>	<b>6,920</b>	<b>1,445</b>	<b>-5,785</b>	<b>25,194</b>	<b>2,580</b>
<b>Expenditures by Type</b>								
Salaries, Wages & Benefits	13,820	13,409	0	315	395	0	14,119	710
Overtime	1,297	647	0	15	0	0	662	15
Material & Services	47,382	48,106	0	6,250	1,425	0	55,781	7,675
Transfers/Grants/Financial Charges	5,028	5,326	0	0	0	0	5,326	0
Fleet Costs	10,294	8,293	0	340	0	0	8,633	340
Program Facility Costs	0	0	0	0	0	0	0	0
Other Internal Costs	1,185	1,510	0	0	0	0	1,510	0
<b>Gross Expenditures</b>	<b>79,006</b>	<b>77,291</b>	<b>0</b>	<b>6,920</b>	<b>1,820</b>	<b>0</b>	<b>86,031</b>	<b>8,740</b>
Recoveries & Allocations	-3,607	-2,757	0	0	0	0	-2,757	0
<b>Net Expenditure</b>	<b>75,399</b>	<b>74,534</b>	<b>0</b>	<b>6,920</b>	<b>1,820</b>	<b>0</b>	<b>83,274</b>	<b>8,740</b>
<b>Percent of 2019 Net Expenditure Budget</b>			<b>0.0%</b>	<b>9.3%</b>	<b>2.4%</b>	<b>0.0%</b>	<b>11.7%</b>	

City of Ottawa  
 Public Works and Environmental Services Department  
 Solid Waste Services - Operating Resource Requirement Analysis  
 In Thousands (\$000)

	2019 Baseline			2020 Adjustments			2020	\$ Change over 2019 Budget
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	User Fees & Revenues	Estimate	
<b>Revenues By Type</b>								
Federal	0	0	0	0	0	0	0	0
Provincial	-5,824	-5,824	0	0	0	0	-5,824	0
Municipal	0	0	0	0	0	0	0	0
Own Funds	0	0	0	0	0	0	0	0
Fees and Services	-45,946	-46,096	0	0	-375	-5,785	-52,256	-6,160
Fines	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
<b>Total Revenue</b>	<b>-51,770</b>	<b>-51,920</b>	<b>0</b>	<b>0</b>	<b>-375</b>	<b>-5,785</b>	<b>-58,080</b>	<b>-6,160</b>
<b>Percent of 2019 Revenue Budget</b>			<b>0.0%</b>	<b>0.0%</b>	<b>0.7%</b>	<b>11.1%</b>	<b>11.9%</b>	
<b>Net Requirement</b>	<b>23,629</b>	<b>22,614</b>	<b>0</b>	<b>6,920</b>	<b>1,445</b>	<b>-5,785</b>	<b>25,194</b>	<b>2,580</b>
<b>Percent of 2019 Net Requirement Budget</b>			<b>0.0%</b>	<b>30.6%</b>	<b>6.4%</b>	<b>-25.6%</b>	<b>11.4%</b>	
<b>Full Time Equivalents (FTE's)</b>		69.40	0.00	0.00	4.00	0.00	<b>73.40</b>	<b>4.00</b>
<b>Percent of 2019 FTE's</b>			<b>0.0%</b>	<b>0.0%</b>	<b>5.8%</b>	<b>0.0%</b>	<b>5.8%</b>	

City of Ottawa  
Public Works and Environmental Services Department  
Solid Waste Services - Operating Resource Requirement Explanatory Notes  
In Thousands (\$000)

2019 Forecast vs. Budget Variance Explanation	Surplus / (Deficit)		
	Expense	Revenue	Net
Deficit mainly due to increased Fleet costs for the In House operations.	-865	-150	-1,015
<b>Total Surplus / (Deficit)</b>	<b>-865</b>	<b>-150</b>	<b>-1,015</b>

  

2020 Pressure Category / Explanation	Increase / (Decrease)			
	Expense	Revenue	Net 2020 Changes	FTE Impact
<b>Maintain Services</b>				
All programs include an adjustment for potential 2020 cost of living, increments and benefit adjustments.	330	0	330	0.00
Inflationary increase to curbside and multi res garbage, recycling and green bin collection contracts.	6,200	0	6,200	0.00
Inflationary increase to recycling and organics processing contracts.	50	0	50	0.00
Increase in Fleet costs related to inflation on compensation contracts, parts, fuel, contribution to capital reserve and maintenance.	340	0	340	0.00
<b>Total Maintain Services</b>	<b>6,920</b>	<b>0</b>	<b>6,920</b>	<b>0.00</b>
<b>Growth</b>				
Increase to curbside and multi res garbage, recycling and green bin collection contracts due to increase in number of households.	520	0	520	0.00
Increase in per household revenues due to the increase in number of households.	0	-375	-375	0.00
New Solid waste Inspector due to growth in the number of households (includes Fleet operating costs for 1 new vehicle).	105	0	105	1.00
Solid Waste Planners to oversee the strategic planning, development, implementation, evaluation and enhancement of the City's Solid Waste Master Plan.	300	0	300	3.00
Service level improvements to the multi res collection contracts.	895	0	895	0.00
<b>Total Growth</b>	<b>1,820</b>	<b>-375</b>	<b>1,445</b>	<b>4.00</b>
<b>User Fees &amp; Revenues</b>				
See following user fee schedule for details on the specific rates.	0	-3,870	-3,870	0.00
Increase in soils tipping fee revenues	0	-1,915	-1,915	0.00
<b>Total User Fees &amp; Revenues</b>	<b>0</b>	<b>-5,785</b>	<b>-5,785</b>	<b>0.00</b>
<b>Total Budget Changes</b>	<b>8,740</b>	<b>-6,160</b>	<b>2,580</b>	<b>4.00</b>

City of Ottawa  
Public Works & Environmental Services Department  
Forestry Services - Operating Resource Requirement Analysis  
In Thousands (\$000)

	2019 Baseline			2020 Adjustments			2020	\$ Change over 2019 Budget
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	User Fees & Revenues	Estimate	
<b>Expenditures by Program</b>								
Forestry Services	18,045	18,745	0	245	0	0	18,990	245
<b>Gross Expenditure</b>	<b>18,045</b>	<b>18,745</b>	<b>0</b>	<b>245</b>	<b>0</b>	<b>0</b>	<b>18,990</b>	<b>245</b>
Recoveries & Allocations	-35	0	0	0	0	0	0	0
Revenue	-255	-45	0	0	0	0	-45	0
<b>Net Requirement</b>	<b>17,755</b>	<b>18,700</b>	<b>0</b>	<b>245</b>	<b>0</b>	<b>0</b>	<b>18,945</b>	<b>245</b>
<b>Expenditures by Type</b>								
Salaries, Wages & Benefits	8,148	8,074	0	190	0	0	8,264	190
Overtime	175	172	0	5	0	0	177	5
Material & Services	8,375	9,196	0	0	0	0	9,196	0
Transfers/Grants/Financial Charges	5	0	0	0	0	0	0	0
Fleet Costs	1,248	1,282	0	50	0	0	1,332	50
Program Facility Costs	0	0	0	0	0	0	0	0
Other Internal Costs	94	21	0	0	0	0	21	0
<b>Gross Expenditures</b>	<b>18,045</b>	<b>18,745</b>	<b>0</b>	<b>245</b>	<b>0</b>	<b>0</b>	<b>18,990</b>	<b>245</b>
Recoveries & Allocations	-35	0	0	0	0	0	0	0
<b>Net Expenditure</b>	<b>18,010</b>	<b>18,745</b>	<b>0</b>	<b>245</b>	<b>0</b>	<b>0</b>	<b>18,990</b>	<b>245</b>
<b>Percent of 2019 Net Expenditure Budget</b>			<b>0.0%</b>	<b>1.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>1.3%</b>	
<b>Revenues By Type</b>								
Federal	0	0	0	0	0	0	0	0
Provincial	0	0	0	0	0	0	0	0
Municipal	0	0	0	0	0	0	0	0
Own Funds	0	0	0	0	0	0	0	0
Fees and Services	-255	-45	0	0	0	0	-45	0
Fines	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
<b>Total Revenue</b>	<b>-255</b>	<b>-45</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-45</b>	<b>0</b>
<b>Percent of 2019 Revenue Budget</b>			<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	
<b>Net Requirement</b>	<b>17,755</b>	<b>18,700</b>	<b>0</b>	<b>245</b>	<b>0</b>	<b>0</b>	<b>18,945</b>	<b>245</b>
<b>Percent of 2019 Net Requirement Budget</b>			<b>0.0%</b>	<b>1.3%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>1.3%</b>	
<b>Full Time Equivalents (FTE's)</b>		82.32	0.00	0.00	0.00	0.00	<b>82.32</b>	<b>0.00</b>
<b>Percent of 2019 FTE's</b>			<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	

City of Ottawa  
 Public Works & Environmental Services Department  
 Forestry Services - Operating Resource Requirement Explanatory Notes  
 In Thousands (\$000)

2019 Forecast vs. Budget Variance Explanation	Surplus / (Deficit)		
	Expense	Revenue	Net
Surplus mainly due to reduced tree maintenance requirements and increased revenues from tree compensation program as a result of increased developer infill construction.	735	210	945
<b>Total Surplus / (Deficit)</b>	<b>735</b>	<b>210</b>	<b>945</b>

2020 Pressure Category / Explanation	Increase / (Decrease)			
	Expense	Revenue	Net 2020 Changes	FTE Impact
<b>Maintain Services</b> All programs include an adjustment for potential 2020 cost of living, increments and benefit adjustments.	195	0	195	0.00
Increase in Fleet costs related to inflation on compensation contracts, parts, fuel, contribution to capital reserve and maintenance.	50	0	50	0.00
<b>Total Maintain Services</b>	<b>245</b>	<b>0</b>	<b>245</b>	<b>0.00</b>
<b>User Fees &amp; Revenues</b> See following user fee schedule for details on the specific rates.	0	0	0	0.00
<b>Total User Fees &amp; Revenues</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00</b>
<b>Total Budget Changes</b>	<b>245</b>	<b>0</b>	<b>245</b>	<b>0.00</b>

# Capital Budget

City of Ottawa  
 2020 Draft Capital Budget  
 Standing Committee on Environmental Protection, Water and Waste Management - Tax Supported  
 In Thousands (\$000)

Service Area: Environment											
Category	2020 Capital Budget	Revenues	Tax Supported/ Dedicated Reserves	Rate Supported Reserves	Develop. Charges	Gas Tax	Debt				
							Tax/ Dedicated	Rate	Develop. Charges	Gas Tax	Total Debt
Renewal of City Assets	70	0	70	0	0	0	0	0	0	0	0
Growth	0	0	0	0	0	0	0	0	0	0	0
Regulatory	0	0	0	0	0	0	0	0	0	0	0
Service Enhancements	5,000	0	3,000	0	0	0	2,000	0	0	0	2,000
<b>Total</b>	<b>5,070</b>	<b>0</b>	<b>3,070</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,000</b>

**City of Ottawa**  
**2020 Draft Capital Budget**  
**Service Area: Environment**  
**In Thousands (\$000)**

Project Information			Financial Details							
<b>908880 Energy Evolution</b>			<b>Class of Estimate: C) Planning</b>							
Dept:	Planning, Infrastructure & Economic Development Department	Category: Renewal of City Assets	Ward: CW	Year of Completion: 2019						
<p>In 2019, we staff will bring forward the complete the study portion Final Report of Energy Evolution. This report will outline actions required to meet Council's target of reducing greenhouse gas emission 80% below 2012 levels by 2050. Funding in the 2020 budget will be used to raise awareness about electric vehicles and building retrofits and leverage matching federal and provincial funds for electric vehicle charging infrastructure and building retrofits including thermal considerations.</p> <p>New year of completion 2021.</p>			<b>2020 Request</b>		<b>70</b>	Projected Yearend Unspent Bal.		<b>307</b>		
			Revenues		0	Debt				
			Tax Supported/ Dedicated		70	Tax Supported/ Dedicated Debt		0		
			Rate Supported		0	Rate Supported Debt		0		
			Develop. Charges		0	Develop. Charges Debt		0		
			Gas Tax		0	Gas Tax Debt		0		
			<b>Forecast</b>		<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>		
			Authority		70	0	0	0		
			Spending Plan		277	100	0	0		
			FTE's		0	0	0	0		
Operating Impact		0	0	0	0					
<b>909865 2020 Natural Area Acquisitions (Urban)</b>			<b>Class of Estimate: C) Planning</b>							
Dept:	Planning, Infrastructure & Economic Development Department	Category: Service Enhancements	Ward: CW	Year of Completion: 2022						
<p>The City's corporate strategic plan supports Biodiversity and Ecosystem Health as one of 12 long-term goals. The Official Plan policy 5.2.1. requires the City to purchase certain environmental lands at the request of the landowner. When the opportunity arises, the City seeks to purchase strategic pieces of land in the urban area, which add or link to existing significant natural areas. Most of these lands are identified in the Greenspace Master Plan and the Urban Natural Features Strategy. The ability to purchase key areas would fulfill both a corporate long-term strategic goal and Official Plan policy.</p>			<b>2020 Request</b>		<b>2,000</b>	Projected Yearend Unspent Bal.		<b>0</b>		
			Revenues		0	Debt				
			Tax Supported/ Dedicated		0	Tax Supported/ Dedicated Debt		2,000		
			Rate Supported		0	Rate Supported Debt		0		
			Develop. Charges		0	Develop. Charges Debt		0		
			Gas Tax		0	Gas Tax Debt		0		
			<b>Forecast</b>		<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>		
			Authority		2,000	0	0	0		
			Spending Plan		2,000	0	0	0		
			FTE's		0	0	0	0		
Operating Impact		0	0	0	0					



**City of Ottawa**  
**2020 Draft Capital Budget**  
**Service Area: Environment**  
**In Thousands (\$000)**

Project Information			Financial Details					
<b>909836 Energy Management &amp; Invest. Strategy 2020</b>			<b>Class of Estimate: Not Applicable</b>					
Dept:	Recreation, Cultural and Facility Operations Department	Category: Service Enhancements	Ward: CW	Year of Completion: 2022				
<p>The Energy Management Investment Strategy is intended to manage the City's increasing growth in demand for energy through the implementation of various energy conservation measures in City facilities.</p> <p>The Energy Management Investment strategy will reduce the City's environmental footprint, ensure the City's compliance under the mandate of the 2009 Green Energy Act, and continue the City's leadership role in respect to energy conservation and demand management.</p> <p>Throughout 2020, RCFS will invest \$3 million into various facility enhancements designed to reduce overall building energy intensity, energy costs and greenhouse gas emissions. The measures are expected to have an average payback of 8 years.</p>			<b>2020 Request</b>	<b>3,000</b>	Projected Yearend Unspent Bal.		0	
			Revenues	0	Debt			
			Tax Supported/Dedicated	3,000	Tax Supported/Dedicated Debt	0		
			Rate Supported	0	Rate Supported Debt	0		
			Develop. Charges	0	Develop. Charges Debt	0		
			Gas Tax	0	Gas Tax Debt	0		
			<b>Forecast</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	
			Authority	3,000	3,000	3,000	3,000	
			Spending Plan	3,000	3,000	3,000	3,000	
			FTE's	0	0	0	0	
Operating Impact	0	0	0	0				

**City of Ottawa**  
**2020 Draft Capital Budget**  
**Standing Committee on Environmental Protection, Water and Waste Management - Tax Supported**  
**In Thousands (\$000)**

Service Area: Solid Waste											
Category	2020 Capital Budget	Revenues	Tax Supported/ Dedicated Reserves	Rate Supported Reserves	Develop. Charges	Gas Tax	Debt				
							Tax/ Dedicated	Rate	Develop. Charges	Gas Tax	Total Debt
Renewal of City Assets	1,550	0	1,550	0	0	0	0	0	0	0	0
Growth	100	0	100	0	0	0	0	0	0	0	0
Regulatory	4,950	0	4,950	0	0	0	0	0	0	0	0
Service Enhancements	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>6,600</b>	<b>0</b>	<b>6,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**City of Ottawa**  
**2020 Draft Capital Budget**  
**Service Area: Solid Waste**  
 In Thousands (\$000)

Program Information			Financial Details					
<b>Solid Waste Landfill Management</b>			<b>Class of Estimate:</b>	<b>Not Applicable</b>				
Dept: Public Works & Environmental Services Department	Category: Regulatory	Ward: Multiple	Year of Completion: Various					
<p>The Trail Road Solid Waste Landfill requires annual maintenance, repair and upgrade to meet regulatory requirements as specified in the Provincial Certificate of Approval. This program consists of landfill capping of various stages, gas collection systems, groundwater containment solutions, cell expansion and other landfill management projects to keep the landfill operating efficiently, effectively and in compliance.</p>			<b>2020 Request</b>	<b>4,950</b>	Projected Yearend Unspent Bal.		0	
			Revenues	0	Debt			
			Tax Supported/Dedicated	4,950	Tax Supported/Dedicated Debt	0		
			Rate Supported	0	Rate Supported Debt	0		
			Develop. Charges	0	Develop. Charges Debt	0		
			Gas Tax	0	Gas Tax Debt	0		
			<b>Forecast</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	
			Authority	4,950	11,834	17,088	1,850	
			Spending Plan	4,950	11,834	17,088	1,850	
			FTE's	0	0	0	0	
Operating Impact	0	0	0	0				

**City of Ottawa**  
**2020 Draft Capital Budget**  
**Service Area: Solid Waste**  
**In Thousands (\$000)**

Project(s) within a Program Information			\$000's
<b>907238 Landfill Disposal Stage 2 Capping</b>			<b>Class of Estimate: Not Applicable</b>
Category: Regulatory	Ward: CW	Year of Completion: 2020	<b>3,300</b>
<p>Vertical expansion of the Trail Waste Facility was approved in 2005 as part of an Environmental Assessment (EA) Optimization/Expansion Project. The landfilling operation commenced with the vertical expansion of Stage 1 in 2007. Stage 1 capping was completed in 2015/16 and now Stage 2 is being progressively capped.</p> <p>As dictated by the Environmental Assessment, the final cover for Stage 2 is a low permeability geomembrane described conceptually in "Appendix M – Design and Operations Report, Trail Waste Facility Landfill, Optimization/Expansion Project, Environmental Assessment/Environmental Protection Act Document". Stage 2 is being capped over three years. The 1st phase was completed in 2018, the next phase will be completed in 2019 and the final phase will be completed in 2020.</p>			
<b>907353 Trail Rd Gas Collection System Expansion</b>			<b>Class of Estimate: A) Pre-Tender</b>
Category: Regulatory	Ward: 21	Year of Completion: 2019	<b>1,000</b>
<p>In accordance with the requirements of the Environmental Protection Act, the City of Ottawa is required to prevent the migration of landfill gas into the environment. The landfill gas collection system was expanded to Stage 3 and 4 as well as around the perimeter of the site over the past several years to compliment landfilling activities and mitigate off-site migration. The City continues to operate under a voluntary compliance program with the Ministry of Environment, Conservation, and Parks (MECP) as a result of exceedence of landfill gas trigger concentrations along the perimeter of the site. Functions associated with the activity include replacement of the temporary perimeter flare, repairs and expansion of the existing gas collection system and installation of a permanent gas collection system on completed portions of Stage 2 and 3 of the Trail Road Solid Waste Landfill. Furthermore, a supplementary enhanced gas collection system will need to be designed and installed in conjunction with the leachate recirculation system. New estimated completion date 2022.</p>			
<b>907611 Trail Road Stormwater Ponds and Ditches</b>			<b>Class of Estimate: A) Pre-Tender</b>
Category: Renewal of City Assets	Ward: 21	Year of Completion: 2020	<b>300</b>
<p>The Trail Road Solid Waste Landfill operates a stormwater management Works in accordance with Section 53 of the Ontario Water Resources Act, which services a 150-hectare catchment area for the collection, treatment, and disposal of stormwater run-off.</p> <p>Final geomembrane cover installation on Stage 1 and, most recently Stage 2, have significantly increased flows in the stormwater conveyance system at the Trail Road Solid Waste Landfill. This project will evaluate capacity requirements and support the development and repair of the onsite collection system in accordance with the conditions of the Trail Road Solid Waste Landfill Stormwater Management System Certificate of Approval.</p>			

**City of Ottawa**  
**2020 Draft Capital Budget**  
**Service Area: Solid Waste**  
**In Thousands (\$000)**

Project(s) within a Program Information			\$000's
<b>907659</b>	<b>Leachate Recirculation</b>	<b>Class of Estimate: B) Design</b>	<b>250</b>
Category: Regulatory	Ward: CW	Year of Completion: 2024	
<p>Leachate recirculation at the Trail Road Solid Waste Landfill in Stages 3, 4, and 5 for up to five years after waste placement is required as per the commitment outlined in Appendix M – Design and Operations Report, Trail Waste Facility Landfill, Optimization/Expansion Project, Environmental Assessment/Environmental Protection Act Document. This project will incorporate the design and installation of an accepted system for Stage 3A.</p>			
<b>907816</b>	<b>Groundwater Management</b>	<b>Class of Estimate: B) Design</b>	<b>100</b>
Category: Regulatory	Ward: CW	Year of Completion: 2019	
<p>The City of Ottawa owns and operates the Nepean Ground Water Treatment (NGWT) system located at 3704 Moodie Drive. In 2006 the facility was installed to mitigate contaminated ground water migration to adjacent lands west of the closed Nepean Landfill. The facility consists of 6 extraction wells coupled to a mechanical air stripping treatment system designed to remove volatile organic compounds and discharge treated effluent to an adjacent surface water pond located on the closed Nepean Landfill site. A 2016 rehabilitation project (see NGWT Purge Well Rehabilitation Project ESD-SWS-0010) identified widespread infrastructure and electrical failure. As a result, the City and Dillon Consulting completed a Remedial Options Analysis and In-Situ Chemical Treatment pilot, met with the Ministry of Environment, Conservation, and Parks (MECP) and is moving forward with an alternative strategy to manage groundwater compliance. The Class D capital cost estimate for the Chemical treatment is \$144,000 and Phytoremediation is \$85,000 for a total of \$229,000 in 2019 and 2020. New estimated completion date 2020.</p>			

**City of Ottawa**  
**2020 Draft Capital Budget**  
**Service Area: Solid Waste**  
 In Thousands (\$000)

Program Information			Financial Details						
<b>Solid Waste Facilities Upgrade-Renewal</b>			<b>Class of Estimate:</b>		<b>Not Applicable</b>				
Dept: Public Works & Environmental Services Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various						
Solid Waste Landfill buildings and disposal processing facilities require annual maintenance, repair and upgrade to meet regulatory requirements as specified in the Provincial Certificate of Approval.			<b>2020 Request</b>		1,550		Projected Yearend Unspent Bal.	0	
			Revenues		0		Debt		
			Tax Supported/Dedicated		1,550		Tax Supported/Dedicated Debt		0
			Rate Supported		0		Rate Supported Debt		0
			Develop. Charges		0		Develop. Charges Debt		0
			Gas Tax		0		Gas Tax Debt		0
			<b>Forecast</b>		<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	
			Authority		1,550	0	0	0	
			Spending Plan		1,550	0	0	0	
			FTE's		0	0	0	0	
Operating Impact		0	0	0	0				

**City of Ottawa**  
**2020 Draft Capital Budget**  
**Service Area: Solid Waste**  
**In Thousands (\$000)**

Project(s) within a Program Information			\$000's
<b>908013</b>	<b>Trail Road Scalehouse Rehabilitation</b>	<b>Class of Estimate: Not Applicable</b>	<b>100</b>
Category: Renewal of City Assets	Ward: 21	Year of Completion: 2018	
<p>The Trail Road Solid Waste Landfill Scale House was constructed in 1986 and has been an essential hub for the operation of the landfill operation and tonnage tracking for the numerous private, commercial, and Industrial users to the facility for landfilling, recycling, and diversion activities totalling approximately 186,000 transactions per year. This project is to address lifecycle replacement and relocation of the existing facility. New estimated completion date 2020.</p>			
<b>909399</b>	<b>Trail Road Landfill Cap Repair</b>	<b>Class of Estimate: A) Pre-Tender</b>	<b>1,000</b>
Category: Renewal of City Assets	Ward: 21	Year of Completion: 2023	
<p>Vertical expansion of the Trail Road Solid Waste Landfill was approved in 2005 as part of an Environmental Assessment (EA) Optimization/Expansion Project. The land filling operation commenced with the vertical expansion of Stage 1 in 2007. Given the relatively recent placement of this waste subsequent to expansion, significant settlement has occurred in areas under the cap, which has resulted in stormwater drainage issues. The project is to repair these sections and bring the cap back into compliance with the Environmental Compliance Approval requirements.</p>			
<b>909430</b>	<b>Nepean Landfill Cap Repair</b>	<b>Class of Estimate: A) Pre-Tender</b>	<b>450</b>
Category: Renewal of City Assets	Ward: 21	Year of Completion: 2023	
<p>The Nepean Landfill was capped with a final geomembrane cover in 1993. Some areas under the cap have settled and created stormwater drainage issues. The project is to repair these sections and bring the cap back into compliance with the Environmental Compliance Approval requirements.</p>			

**City of Ottawa**  
**2020 Draft Capital Budget**  
**Service Area: Solid Waste**  
 In Thousands (\$000)

Program Information			Financial Details						
<b>Solid Waste Fleet</b>			<b>Class of Estimate:</b>		<b>Not Applicable</b>				
Dept: Public Works & Environmental Services Department	Category: Growth	Ward: Multiple	Year of Completion: Various						
Solid Waste Fleet requires growth to meet the expanding needs of the City's service areas. As the City grows, Solid Waste realizes expanding house counts, increased tonnages and increase kilometres.			<b>2020 Request</b>		100		Projected Yearend Unspent Bal.	0	
			Revenues		0		Debt		
			Tax Supported/Dedicated		100		Tax Supported/Dedicated Debt		0
			Rate Supported		0		Rate Supported Debt		0
			Develop. Charges		0		Develop. Charges Debt		0
			Gas Tax		0		Gas Tax Debt		0
			<b>Forecast</b>		<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	
			Authority		100	0	0	0	
			Spending Plan		100	0	0	0	
			FTE's		0	0	0	0	
Operating Impact		0	0	0	0				



**City of Ottawa**  
**2020 Draft Capital Budget**  
**Service Area: Solid Waste**  
 In Thousands (\$000)

Project(s) within a Program Information			\$000's
<b>909742</b>	<b>Solid Waste Fleet Growth</b>	<b>Class of Estimate: Not Applicable</b>	<b>100</b>
Category: Growth	Ward: CW	Year of Completion: 2020	
<p>Solid Waste is requesting Fleet Growth for 2 new inspector positions. One is related to the On Street Waste Receptacles/City Parks project and the other is related to the growth in Curbside and Multi residential locations.</p>			

**City of Ottawa**  
**2020 Capital Draft Budget**  
**Standing Committee on Environmental Protection, Water and Waste Management - Tax**  
**Four Year Forecast Summary**  
**In Thousands \$(000's)**

Project Description	2020	2021	2022	2023	Total
<b>Environment</b>					
Renewal of City Assets					
908880 Energy Evolution	70	-	-	-	70
<b>Renewal of City Assets Total</b>	<b>70</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>70</b>
Service Enhancements					
909836 Energy Mngmnt & Invest. Strategy 2020	3,000	3,000	3,000	3,000	12,000
909865 2020 Natural Area Acquisitions (Urban)	2,000	-	-	-	2,000
<b>Service Enhancements Total</b>	<b>5,000</b>	<b>3,000</b>	<b>3,000</b>	<b>3,000</b>	<b>14,000</b>
<b>Environment Total</b>	<b>5,070</b>	<b>3,000</b>	<b>3,000</b>	<b>3,000</b>	<b>14,070</b>
<b>Solid Waste</b>					
Renewal of City Assets					
907611 Trail Road Stormwater Ponds and Ditches	300	-	-	-	300
907614 Barnsdale Base Preparation	-	600	600	600	1,800
908013 Trail Road Scalehouse Rehabilitation	100	-	-	-	100
909399 Trail Road Landfill Cap Repair	1,000	-	-	-	1,000
909430 Nepean Landfill Cap Repair	450	-	-	-	450
<b>Renewal of City Assets Total</b>	<b>1,850</b>	<b>600</b>	<b>600</b>	<b>600</b>	<b>3,650</b>
Growth					
909742 Solid Waste Fleet Growth	100	-	-	-	100
<b>Growth Total</b>	<b>100</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>100</b>
Regulatory					
907238 Landfill Disposal Stage 2 Capping	3,300	7,400	-	-	10,700
907352 Landfill Stage 3 Capping	-	5,000	5,000	5,000	15,000
907353 Trail Rd Gas Collection System Expansion	1,000	500	500	1,500	3,500
907659 Leachate Recirculation	250	850	150	-	1,250
907799 Landfill Disposal Stage 5 Development	-	2,534	16,188	-	18,722
907815 Trail Road Landfill - Exp & Development	-	550	250	350	1,150
907816 Groundwater Management	100	-	-	-	100
<b>Regulatory Total</b>	<b>4,650</b>	<b>16,834</b>	<b>22,088</b>	<b>6,850</b>	<b>50,422</b>
Service Enhancements					
906167 Leachate Treatment Facility	-	7,000	7,000	6,000	20,000
909431 Long Term Planning	-	-	150	300	450

**City of Ottawa**  
**2020 Capital Draft Budget**  
**Standing Committee on Environmental Protection, Water and Waste Management - Tax**  
**Four Year Forecast Summary**  
**In Thousands \$(000's)**

Project Description	2020	2021	2022	2023	Total
<b>Service Enhancements Total</b>	-	<b>7,000</b>	<b>7,150</b>	<b>6,300</b>	<b>20,450</b>
<b>Solid Waste Total</b>	<b>6,600</b>	<b>24,434</b>	<b>29,838</b>	<b>13,750</b>	<b>74,622</b>
<b>Grand Total</b>	<b>11,670</b>	<b>27,434</b>	<b>32,838</b>	<b>16,750</b>	<b>88,692</b>

**City of Ottawa**  
**2020 Draft Capital Budget**  
**Standing Committee on Environmental Protection, Water and Waste Management - Tax Supported**  
**Works-In-Progress**  
**In Thousands \$(000's)**

Project Description	Authority	Expenditures as of August 31, 2019	August 31 2019 Unspent Cash Balance	Total Contractual Obligations	Unspent Balance Including Contractual Obligations
<b>Environment</b>					
905937 2016 Rural Area Acquisitions	1,160	545	615	4	611
906381 AQCCMP Implementation	374	52	322	-	322
907516 S37 Nepean/Metcalf Streetscaping Proj.	754	678	76	-	76
907985 Energy Management & Invest. Strategy SI	4,000	3,743	257	68	189
908017 Green Fleet - 2016	1,222	604	618	-	618
908869 Green Fleet	500	-	500	-	500
908880 Energy Evolution	445	138	307	-	307
908881 Canada 150 Maple Grove	31	-	31	-	31
908894 2018 Natural Area Acquisitions (Rural)	340	89	251	-	251
909109 2018 Natural Area Acquisitions (Urban)	368	-	368	-	368
909139 AQCCMP National Disaster Mitigation Prog	61	32	29	10	18
909151 Community Energy Initiatives	500	450	50	-	50
909255 Renewable Energy Transition Projects	633	197	436	-	436
909452 Energy Mgmt & Investment Strategy 2019	3,000	-	3,000	21	2,979
909607 Climate Emergency	250	-	250	-	250
<b>Environment Total</b>	<b>13,638</b>	<b>6,528</b>	<b>7,110</b>	<b>104</b>	<b>7,006</b>
<b>Solid Waste</b>					
906167 Leachate Treatment Facility	12,500	6,066	6,434	-	6,434
906535 Bin Collection Conversion	950	838	112	-	112
907004 Landfill Disposal Stage 1 Capping	14,565	8,348	6,217	-	6,217
907043 Springhill Landfill	2,000	12	1,988	-	1,988
907238 Landfill Disposal Stage 2 Capping	16,158	6,591	9,567	-	9,567
907353 Trail Rd Gas Collection System Expansion	5,000	3,406	1,594	7	1,587
907354 Solid Waste Business Technology	1,500	65	1,435	-	1,435
907611 Trail Road Stormwater Ponds and Ditches	250	-	250	-	250
907613 Small Load Expansion	300	-	300	-	300
907614 Barnsdale Base Preparation	700	22	678	-	678
907798 Nepean Landfill Gas Collection Rehab	120	-	120	-	120

**City of Ottawa**  
**2020 Draft Capital Budget**  
**Standing Committee on Environmental Protection, Water and Waste Management - Tax Supported**  
**Works-In-Progress**  
**In Thousands \$(000's)**

Project Description	Authority	Expenditures as of August 31, 2019	August 31 2019 Unspent Cash Balance	Total Contractual Obligations	Unspent Balance Including Contractual Obligations
907799 Landfill Disposal Stage 5 Development	1,011	-	1,011	-	1,011
907815 Trail Road Landfill - Exp & Development	1,500	629	871	1	871
907816 Groundwater Management	1,350	785	565	-	565
908011 Ottawa Waste Plan Implementation	800	-	800	0	800
908012 Processing & Disposal Technology Review	600	-	600	-	600
908013 Trail Road Scalehouse Rehabilitation	2,000	1,392	608	16	591
908685 Solid Waste Fleet Growth - Landfill	1,350	1,243	107	-	107
908686 Solid Waste Fleet Growth - Landfill 2019	450	-	450	-	450
909430 Nepean Landfill Cap Repair	550	-	550	-	550
909431 Long Term Planning	900	388	512	-	512
<b>Solid Waste Total</b>	<b>64,554</b>	<b>29,785</b>	<b>34,769</b>	<b>25</b>	<b>34,744</b>
<b>Grand Total</b>	<b>78,192</b>	<b>36,313</b>	<b>41,879</b>	<b>129</b>	<b>41,750</b>