



Environment and Climate Protection Committee

**Tax Supported Programs** 

Draft BUDGET 2018

**Balanced, Affordable and Progressive** 

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# Planning, Infrastructure and Economic Development (PIED) Department Infrastructure Services (IS) 2018 Budget Briefing Note

#### Description

Infrastructure Services (IS) is part of the Planning, Infrastructure and Economic Development (PIED) Department, a department that champions the city-building agenda – 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

In addition to Infrastructure Services' most visible service, construction, there are two key priorities: Comprehensive Asset Management (CAM) Program which focuses on defining the right projects needed to sustain the City's infrastructure and the Integrated Departmental Management Plan (IDMP) focused on doing the projects right.

The following are services offered by Infrastructure Services:

#### **Asset Management**

Administer and optimize the lifecycle of municipal infrastructure, maintain 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.

#### **Quality Assurance and Standards**

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.

#### Public Works & Environmental Services Department Solid Waste Services 2018 Budget Briefing Note

#### Description

The Solid Waste Services Branch is responsible for the operational planning, development, management, and environmentally sound operation of the residential solid waste management system for the City. This includes:

- Operational planning for future requirements including system growth and development provision of collection, disposal and processing facilities, and ensuring there is long term capacity for residential waste
- Provision of systems and facilities for residential recycling and household hazardous waste management
- Provision of systems and facilities for residential organics collection and composting
- Planning, developing and implementing residential waste diversion programs
- Environmentally sound management, operation and maintenance of City-owned landfills and collection programs
- Provision of graffiti removal from City property in accordance with the Council-approved Graffiti Management Strategy

#### Programs/Services Offered

- · Collection and disposal of residential waste
- Residential waste diversion programs
- Operational Planning
- Landfill operations
- Compliance management
- Asset management

- Graffiti removal from City assets in the municipal rights-of-way; and
- Financial Resources Management

# Public Works & Environmental Services Department Parks, Forestry & Stormwater Water Services 2018 Budget Briefing Note

#### Description

The Public Works & Environmental Services Department is responsible for overseeing drinking water production and distribution, wastewater collection and treatment, surface water management, solid waste collection, processing and disposal, roads, parks, and forestry maintenance and operations, and parking development and operations.

Public Works & Environmental Services has clear service mandates and clear lines of business accountability including:

- One-stop shop for the city's road, park and forestry operations and maintenance, parking related matters; and environmental services such as drinking water, waste water, surface water and solid waste
- Ability to respond quickly and share resources
- Common service districts for all field operations
- Clear service standards
- Structured around community needs
- Strong focus on continuous improvement and performance management.

#### Programs/Services Offered

#### Parks, Forestry and Stormwater

Provides centralized management of the City's parks including 508 sports fields and 282 ball diamonds, 4,421 hectares of parkland in more than 1,247sites and 1984 play structures. Annually, the service area completes an average of 6,000 service requests with 97% being completed within established service levels.

Manages all aspects of the City's 10,000 hectares of urban and rural forests including 346,000 street and park trees. Plants 125,000 trees annually across the City in urban, suburban and rural areas. Manages invasive species, such has the Emerald Ash Borer. Waters and establishes maintenance of new and hard surface planted trees, removes trees and stumps as required.

Responsible for the operational planning, development and management of the City's storm water drainage and treatment systems. This includes 234 storm water management ponds, 113 underground storm treatment/control facilities, the maintenance of approximately 2, 600 km of storm sewers and appurtenances. The service area conducts approximately 106,000 water quality tests annually. Oversees inter-department storm water programs and initiatives.

City of Ottawa Environment and Climate Protection Committee - Operating Resource Requirement In Thousands (\$000)

	2016	20	17	2018		
	Actual	Forecast	Budget	Estimate	\$ Change over 2017 Budget	
Expenditures by Program						
Infrastructure Services	26,799	26,928	28,436	29,111	675	
Environmental Initiatives	544	526	526	531	5	
Solid Waste Services	69,820	74,421	72,611	74,581	1,970	
Forestry Services	19,043	18,125	18,125	18,290	165	
Gross Expenditure	116,206	120,000	119,698	122,513	2,815	
Recoveries & Allocations	-24,807	-23,714	-25,222	-25,822	-600	
Revenue	-51,367	-55,509	-50,129	-51,154	-1,025	
Net Requirement	40,032	40,777	44,347	45,537	1,190	
Expenditures by Type			·			
Salaries, Wages & Benefits	43,563	43,819	44,548		1,218	
Overtime	1,302	1,262	962	984	22	
Material & Services	55,559	58,873	58,924	60,394	1,470	
Transfers/Grants/Financial Charges	4,686	4,655	5,377	5,377	0	
Fleet Costs	9,303	9,124	8,361	8,466	105	
Program Facility Costs	0	0	0	0	0	
Other Internal Costs	1,793	2,267	1,526	1,526	0	
Gross Expenditures	116,206	120,000	119,698	•	2,815	
Recoveries & Allocations	-24,807	-23,714	-25,222	-25,822	-600	
Net Expenditure	91,399	96,286	94,476	96,691	2,215	
Revenues By Type						
Federal	0	0	0	0	0	
Provincial	-6,181	-6,129	-6,129	-6,129	0	
Municipal	0	0	0	0	0	
Own Funds	-58	0	0	0	0	
Fees and Services	-45,128	-49,380	-44,000	-45,025	-1,025	
Fines	0	0	0	0	0	
Other	0	0	0	0	0	
Total Revenue	-51,367	-55,509	-50,129	-51,154	-1,025	
Net Requirement	40,032	40,777	44,347	45,537	1,190	
Full Time Equivalents			350.14	350.14	0.00	

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

III Triousarius (\$000)	2016	20	17	2018		
	Actual	Forecast	Budget	Estimate	\$ Change over 2017 Budget	
Expenditures by Program						
Director's Office	1,316	781	781	816	35	
Quality Assurance	2,759	2,305	2,305	2,355	50	
Combined Sewage Storage Tunnel Project	263	357	155	160	5	
Design & Construction - Branch 1	6,107	6,087	6,312	6,447	135	
Design & Construction - Branch 2	5,249	5,645	6,589	6,764	175	
Asset Management	11,105	11,753	12,294	12,569	275	
Gross Expenditure	26,799	26,928	28,436	29,111	675	
Recoveries & Allocations	-20,401	-21,163	-22,671	-23,271	-600	
Revenue	-73	-39	-39	-39	0	
Net Requirement	6,325	5,726	5,726	5,801	75	
Expenditures by Type						
Salaries, Wages & Benefits	23,507	22,499	24,116	24,791	675	
Overtime	157	177	177	177	0	
Material & Services	2,927	4,046	3,975	3,975	0	
Transfers/Grants/Financial Charges	0	0	0	0	0	
Fleet Costs	85	97	97	97	0	
Program Facility Costs	0	0	0	0	0	
Other Internal Costs	123	109	71	71	0	
Gross Expenditures	26,799	26,928	28,436	29,111	675	
Recoveries & Allocations	-20,401	-21,163	-22,671	-23,271	-600	
Net Expenditure	6,398	5,765	5,765	5,840	75	
Revenues By Type						
Federal	0	0	0	0	0	
Provincial	0	0	0	0	0	
Municipal	0	0	0	0	0	
Own Funds	-58	0	0	0	0	
Fees and Services	-15	-39	-39	-39	0	
Fines	0	0	0	0	0	
Other	0	0	0	0	0	
Total Revenue	-73	-39	-39	-39	0	
Net Requirement	6,325	5,726	5,726	5,801	75	
Full Time Equivalents		·	198.42	198.42	0.00	

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

	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2018 Revenue (\$000)
Road Cut Degradation Fees							
Road Cut Pavement Degradation fees (per square m	,						
2 years or less	34.80	35.50	36.20	2.0%	4.0%	01-Jan-18	
2 to 4 years	28.90	29.50	30.10	2.0%	4.2%	01-Jan-18	
4 to 7 years	23.20	23.70	24.20	2.1%	4.3%	01-Jan-18	
7 to 10 years	14.50	14.80	15.10	2.0%	4.1%	01-Jan-18	
10 years or more	5.80	5.90	6.00	1.7%	3.4%	01-Jan-18	
Contract Manual							
Contract Manual (CD only)	75.20	76.70	80.00	4.3%	6.4%	01-Jan-18	
Guideline Publications							
Guideline Publications ( hard copy)	301.00	307.00	350.00	14.0%	16.3%	01-Jan-18	
Guideline Publications (CD only)	75.20	76.70	80.00	4.3%	6.4%	01-Jan-18	
Accident Inspections							
3 hour minimum (hourly rate)	153.00	156.10	160.00	2.5%	4.6%	01-Jan-18	
Any third party charges (cost recovery)	100%	100%	100%	0.0%	0.0%	01-Jan-18	
Transfer of Review							
Transfer of Review Fees are per the Ministry of Environment and Climate Change							
Administration and Overhead Charge							
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-18	
Total Departmental							0

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

III Tilousanus (4000)	2016	20	17	2018		
	Actual	Forecast Budget		Estimate	\$ Change over 2017 Budget	
Expenditures by Program						
Environmental Initiatives	544	526	526	531	5	
Gross Expenditure	544	526	526	531	5	
Recoveries & Allocations	-132	0	0	0	0	
Revenue	0	0	0	0	0	
Net Requirement	412	526	526	531	5	
Expenditures by Type						
Salaries, Wages & Benefits	395	343	343	348	5	
Overtime	3	5	5	5	0	
Material & Services	84	128	128	128	0	
Transfers/Grants/Financial Charges	58	50	50	50	0	
Fleet Costs	0	0	0	0	0	
Program Facility Costs	0	0	0	0	0	
Other Internal Costs	4	0	0	0	0	
Gross Expenditures	544	526	526	531	5	
Recoveries & Allocations	-132	0	0	0	0	
Net Expenditure	412	526	526	531	5	
Revenues By Type						
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	
Total Revenue	0	0	0	0	0	
Net Requirement	412	526	526	531	5	
Full Time Equivalents			2.00	2.00	0.00	

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

	2016	20	17	2018		
	Actual	Forecast	Budget	Estimate	\$ Change over 2017 Budget	
Expenditures by Program						
Director's Office	306	827	476	481	5	
Diversion/Recycling	41,446	41,644	41,516	42,539	1,023	
Graffiti Management	0	889	659	659	0	
Landfill Operations/Disposal	7,467	10,744	8,899	9,243	344	
Garbage Collection	14,655	14,594	14,895	15,487	592	
Other	624	419	419	425	6	
Solid Waste Non Departmental	5,322	5,304	5,747	5,747	0	
Gross Expenditure	69,820	74,421	72,611	74,581	1,970	
Recoveries & Allocations	-4,271	-2,551	-2,551	-2,551	0	
Revenue	-51,037	-55,425	-50,045	-51,070	-1,025	
Net Requirement	14,512	16,445	20,015	20,960	945	
Expenditures by Type						
Salaries, Wages & Benefits	12,169	13,346	12,458	12,849	391	
Overtime	917	915	615	634	19	
Material & Services	42,899	45,503	45,625	47,095	1,470	
Transfers/Grants/Financial Charges	4,603	4,605	5,327	5,327	0	
Fleet Costs	7,832	7,915	7,152	7,242	90	
Program Facility Costs	0	0	0	0	0	
Other Internal Costs	1,400	2,137	1,434	1,434	0	
Gross Expenditures	69,820	74,421	72,611	74,581	1,970	
Recoveries & Allocations	-4,271	-2,551	-2,551	-2,551	0	
Net Expenditure	65,549	71,870	70,060	72,030	1,970	
Revenues By Type						
Federal	0	0	0	0	0	
Provincial	-6,181	-6,129	-6,129	-6,129	0	
Municipal	0,101	0,120	0,120	0,120	0	
Own Funds	0	0	0	0	0	
Fees and Services	-44,856	-49,296	-43,916	-44,941	-1,025	
Fines	0	0	0	0	1,020	
Other	0	0	0	0	0	
Total Revenue	-51,037	-55,425	-50,045	-51,070	-1,025	
Net Requirement	14,512	16,445	20,015	20,960	945	
Full Time Equivalents	,312		68.40		0.00	

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

	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2018 Revenue (\$000)
Solid Waste - User Fees							-560
Single Family Household	82.00	84.00	86.00	2.4%	4.9%	01-Jan-18	
Multi Residential Household	40.00	41.00	42.00	2.4%	5.0%	01-Jan-18	
Yellow Bag per bag fee	3.65	3.75	3.75	0.0%	2.7%	01-Jan-18	
Landfill Operations - Tipping Fees							-40
Waste Materials							
Garbage <=100 kg (minimum)	10.60	10.80	11.00	1.9%	3.8%	01-Mar-18	
Garbage >100 kg (per tonne)	106.00	108.00	110.00	1.9%	3.8%	01-Mar-18	
Mixed garbage & recyclable material <=100 kg (minimum)	53.00	21.60	22.00	1.9%	-58.5%	01-Mar-18	
Mixed garbage & recyclable material >100 kg (per tonne)	212.00	216.00	220.00	1.9%	3.8%	01-Mar-18	
Asbestos <=250 kg per load flat rate (minimum)	116.75	119.00	121.00	1.7%	3.6%	01-Mar-18	
Asbestos >250 kg (per tonne)	467.00	476.00	484.00	1.7%	3.6%	01-Mar-18	
Diversion Program - Clean Loads							
Metal /Tires	Free	Free	Free	N/A	N/A	01-Mar-18	
E-waste	Free	Free	Free	N/A	N/A	01-Mar-18	
Blue Box Material	Free	Free	Free	N/A	N/A	01-Mar-18	
Cardboard <=100 kg (minimum)	Free	5.20	5.30	1.9%	N/A	01-Mar-18	
Cardboard >100 kg (per tonne)	Free	52.00	53.00	1.9%	N/A	01-Mar-18	
Leaf and Yard Waste under 10 cm in diameter <=100 kg							
(minimum)	12.75	5.20	3.75	-27.9%	-70.6%	01-Mar-18	
Leaf and Yard Waste >100 kg (per tonne)	51.00	52.00	37.50	-27.9%	-26.5%	01-Mar-18	
Soil/Fill - required <=200 kg (minimum) (Top soil, sand, sod, asphalt, masonry, concrete without rebar)	6.35	5.40	5.50	1.9%	-13.4%	01-Mar-18	
Soil/Fill - required >200 kg (per tonne) (Top soil, sand,							
sod, asphalt, masonry, concrete without rebar)	26.50	27.00	27.50	1.9%	3.8%	01-Mar-18	
Woodchips <=200 kg (minimum)		5.40	5.50	1.9%	N/A	01-Mar-18	
Woodchips >200 kg (per tonne)	26.50	27.00	27.50	1.9%	3.8%	01-Mar-18	

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

	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2018 Revenue (\$000)
Retail Materials Program							
Municipal Compost <=200 kg (minimum)	11.50	7.80	8.00	2.6%	-30.4%	01-Mar-18	
Municipal Compost >200 kg (per tonne)	28.50	39.00	40.00	2.6%	40.4%	01-Mar-18	
Blue/Black boxes (sold to public through retailer, each)*	9.99	9.99	9.99	0.0%	0.0%	N/A	
Organics Green Bin 80 L (sold to public through retailer,							
each, except for service growth)*	39.99	39.99	39.99	0.0%	0.0%	N/A	
Organics Green Bin 46 L (sold to public through retailer,							
each, except for service growth)*	29.99	29.99	29.99	0.0%	0.0%	N/A	
Organics Kitchen Container (sold to public through							
retailer, each, except for service growth)*	8.99	8.99	8.99	0.0%	0.0%	N/A	
Total Departmental							-600

#### Note:

<sup>\*</sup> These prices are set until June 30, 2018 at which time a new agreement with new prices, yet to be negotiated and determined, will come into effect.

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

	2016	20	17	2018	
	Actual	Forecast	Budget	Estimate	\$ Change over 2017 Budget
Expenditures by Program					
Forestry Services	19,043	18,125	18,125	18,290	165
Gross Expenditure	19,043	18,125	18,125	18,290	165
Recoveries & Allocations	-3	0	0	0	0
Revenue	-257	-45	-45	-45	0
Net Requirement	18,783	18,080	18,080	18,245	165
Expenditures by Type					
Salaries, Wages & Benefits	7,492	7,631	7,631	7,778	147
Overtime	225	165	165	168	3
Material & Services	9,649	9,196	9,196	9,196	0
Transfers/Grants/Financial Charges	25	0	0	0	0
Fleet Costs	1,386	1,112	1,112	1,127	15
Program Facility Costs	0	0	0	0	0
Other Internal Costs	266	21	21	21	0
Gross Expenditures	19,043	18,125	18,125	18,290	165
Recoveries & Allocations	-3	0	0	0	0
Net Expenditure	19,040	18,125	18,125	18,290	165
Revenues By Type					
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	-257	-45	-45	-45	0
Fines	0	0	0	0	0
Other	0	0	0	0	0
Total Revenue	-257	-45	-45	-45	0
Net Requirement	18,783	18,080	18,080	18,245	165
Full Time Equivalents			81.32	81.32	0.00

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

	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2018 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%	N/A		
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.  Total Departmental	15%	15%	15%	N/A	N/A		

City Of Ottawa 2018 Draft Capital Budget Environment and Climate Protection Committee-Tax Capital Funding Summary In Thousands (\$000's)

Project Description	Revenues	Capital Reserve Fund	Gas Tax	Development Charges	Debt Funding	Grand Total
Environment						
Strategic Initiatives						
908869 Green Fleet	-	500	-	-	-	500
908894 2018 Natural Area Acquisitions (Rural)	-	140	-	-	200	340
909109 2018 Natural Area Acquisitions (Urban)	-	170	-	-	-	170
909115 Energy Mgmt & Invest. Strategy 2018	-	1,000	-	-	-	1,000
909151 Community Energy Intitiatives	-	500	-	-	-	500
Strategic Initiatives Total	-	2,310	-	-	200	2,510
Environment Total	-	2,310	-	-	200	2,510
Solid Waste						
Renewal of City Assets						
908013 Trail Road Scalehouse Rehabilitation	-	300	-	-	-	300
908685 Solid Waste Fleet Growth - Landfill	-	1,350	-	-	-	1,350
Renewal of City Assets Total	-	1,650	-	-	-	1,650
Regulatory						
907238 Landfill Disposal Stage 2 Capping	-	7,579	-	-	-	7,579
907353 Trail Rd Gas Collection System Expansion	-	500	-	-	-	500
907815 Trail Road Landfill - Exp & Development	-	250	-	-	-	250
907816 Groundwater Management	-	750	-	-	-	750
Regulatory Total	-	9,079	-	-	-	9,079
Solid Waste Total	-	10,729	-	-	-	10,729
Grand Total	-	13,039	-	-	200	13,239

City of Ottawa Environment and Climate Protection Committee - Operating Resource Requirement Analysis In Thousands (\$000)

III Tilousalius (\$000)	20	017 Baseline	<del>.</del>		20	18 Adjustmo	ents		2018	
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	Council Priorities	Service Initiatives / Savings	User Fees & Revenues	Estimate	\$ Change over 2017 Budget
Expenditures by Program										
Infrastructure Services	26,928	28,436	0	675	0	0	0		29,111	675
Environmental Initiatives	526	526	0	5	0	0	0		531	5
Solid Waste Services	74,421	72,611	0	1,195	775	0	0		74,581	1,970
Forestry Services	18,125	18,125	0	165	0	0	0		18,290	165
Gross Expenditure	120,000	119,698	0	2,040	775	0	0	0	122,513	2,815
Recoveries & Allocations	-23,714	-25,222	0	-600	0	0	0	0	-25,822	-600
Revenue	-55,509	-50,129	0	0	-425	0	0	-600	-51,154	-1,025
Net Requirement	40,777	44,347	0	1,440	350	0	0	-600	45,537	1,190
Expenditures by Type										
Salaries, Wages & Benefits	43,819	44,548	0	1,068	150	0	0	0	45,766	1,218
Overtime	1,262	962	0	22	0	0	0	0	984	22
Material & Services	58,873	58,924	0	845	625	0	0	0	60,394	1,470
Transfers/Grants/Financial Charges	4,655	5,377	0	0	0	0	0	0	5,377	0
Fleet Costs	9,124	8,361	0	105	0	0	0	0	8,466	105
Program Facility Costs	0	0	0	0	0	0	0	0	0	0
Other Internal Costs	2,267	1,526	0	0	0	0	0	0	1,526	0
Gross Expenditures	120,000	119,698	0	2,040	775	0	0	0	122,513	2,815
Recoveries & Allocations	-23,714	-25,222	0	-600	0	0	0	0	-25,822	-600
Net Expenditure	96,286	94,476	0	1,440	775	0	0	0	96,691	2,215
Percent of 2017 Net Expenditure Budge	et		0.0%	1.5%	0.8%	0.0%	0.0%	0.0%	2.3%	
Revenues By Type										
Federal	0	0	0	0	0	0	0	0	0	0
Provincial	-6,129	-6,129	0	0	0	0	0	0	-6,129	0
Municipal	0	0	0	0	0	0	0	0	0	0
Own Funds	0	0	0	0	0	0	0	0	0	0
Fees and Services	-49,380	-44,000	0	0	-425	0	0	-600	-45,025	-1,025
Fines	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Total Revenue	-55,509	-50,129	0	0	-425	0	0	-600	-51,154	-1,025
Percent of 2017 Revenue Budget			0.0%	0.0%	0.8%	0.0%	0.0%	1.2%	2.0%	
Net Requirement	40,777	44,347	0	1,440	350	0	0	-600	45,537	1,190
Percent of 2017 Net Requirement Budg	jet		0.0%	3.2%	0.8%	0.0%	0.0%	-1.4%	2.7%	
Full Time Equivalents (FTE's)		350.14	0.00	0.00	0.00	0.00	0.00		350.14	0.00
Percent of 2017 FTE's			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

**City of Ottawa** 

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

in Thousands (\$000)	2	017 Baseline	9		20	18 Adjustme	ents		2018	
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	Council Priorities	Service Initiatives / Savings	User Fees & Revenues	Estimate	\$ Change over 2017 Budget
Expenditures by Program										
Director's Office	781	781	0	35	0	0		0	816	35
Quality Assurance	2,305	2,305	0	50	0	0	0	0	2,355	50
Combined Sewage Storage Tunnel Project	357	155	0	5	0	0	0	0	160	5
Design & Construction - Branch 1	6,087	6,312	0	135	0	0			6,447	135
Design & Construction - Branch 2	5,645	6,589	0	175	0	0			6,764	175
Asset Management	11,753	12,294	0	275	0	0	0	0	12,569	275
Gross Expenditure	26,928	28,436	0	675	0	0	0	0	29,111	675
Recoveries & Allocations	-21,163	-22,671	0	-600	0	0		0	-23,271	-600
Revenue	-39	-39	0	0	0	0		0	-39	0
Net Requirement	5,726	5,726	0	75	0	0	0	0	5,801	75
Expenditures by Type	00.400	24.44							0.4 = 0.4	
Salaries, Wages & Benefits	22,499	24,116		675	0	0		0	24,791	675
Overtime	177	177	0	0	0	0		0	177	0
Material & Services	4,046	3,975	0	0	0	0		0	3,975	0
Transfers/Grants/Financial Charges	0	0	0	0	0	0			0	0
Fleet Costs	97	97	0	0	0	0		0	97	0
Program Facility Costs	0	0	0	0	0	0		0	0	0
Other Internal Costs	109	71	0	0	0	0			71	0
Gross Expenditures	26,928	28,436	0	675	0	0		0	29,111	675
Recoveries & Allocations	-21,163	-22,671	0	-600	0	0	·		-23,271	-600
Net Expenditure	5,765	5,765	0	75	0	0		-	5,840	75
Percent of 2017 Net Expenditure Budget			0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	1.3%	
Revenues By Type										
Federal	0	0	0	0	0	0		0	0	0
Provincial	0	0	0	0	0	0	0	0	0	0
Municipal	0	0	0	0	0	0	0	0	0	0
Own Funds	0	0	0	0	0	0		0	0	0
Fees and Services	-39	-39	0	0	0	0		0	-39	0
Fines	0	0	0	0	0	0	·	0	0	0
Other	0	0	0	0	0	0		0	0	0
Total Revenue	-39	-39	0	0	0	0	_	0	-39	0
Percent of 2017 Revenue Budget			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Net Requirement	5,726	5,726	0	75	0	0	0	0	5,801	75
Percent of 2017 Net Requirement Budget			0.0%	1.3%	0.0%	0.0%	0.0%	0.0%	1.3%	
Full Time Equivalents (FTE's)		198.42	0.00	0.00	0.00	0.00	0.00	0.00	198.42	0.00
Percent of 2017 FTE's			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

#### City of Ottawa

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

	Surplus / (Deficit)				
2017 Forecast vs. Budget Variance Explanation	Expense	Revenue	Net		
No significant variance to report.	0	0	0		
Total Surplus / (Deficit)	0	0	0		

		Increase / (Decrease)			
2018 Pressure Category / Explanation	Expense	Revenue	Net 2018 Changes	FTE Impact	
Maintain Services					
All programs include an adjustment for potential 2018 cost of living, increments and					
benefit adjustments.	675	0	675	0.00	
All programs include an adjustment for potential 2018 cost of living, increments and					
benefit adjustments - offset by recoveries and allocations.	-600	0	-600		
Total Maintain Services	75	0	75	0.00	
User Fees & Revenues					
See following user fee schedule for details on the specific rates.	0	0	0	0.00	
Total User Fees & Revenues	0	0	0	0.00	
Total Budget Changes	75	0	75	0.00	

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

In Thousands (\$000)	20	017 Baseline	)		20	)18 Adjustmo	ents		2018	
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	Council Priorities	Service Initiatives / Savings	User Fees & Revenues	Estimate	\$ Change over 2017 Budget
Expenditures by Program										
Environmental Initiatives	526	526	0	5	0	0	0		531	5
Gross Expenditure	526	526	0	5	0	0	0	0	531	5
Recoveries & Allocations	0	0	0	0	0	0	0	0	0	0
Revenue	0	0	0	0	0	0	0	0	0	0
Net Requirement	526	526	0	5	0	0	0	0	531	5
Expenditures by Type										
Salaries, Wages & Benefits	343	343	0	5	0	0	0	0	348	5
Overtime	5	5	0	0	0	0	0	0	5	0
Material & Services	128	128	0	0	0	0	0	0	128	0
Transfers/Grants/Financial Charges	50	50	0	0	0	0	0	0	50	0
Fleet Costs	0	0	0	0	0	0	0	0	0	0
Program Facility Costs	0	0	0	0	0	0	0	0	0	0
Other Internal Costs	0	0	0	0	0	0	0	0	0	0
Gross Expenditures	526	526	0	5	0	0	0	0	531	5
Recoveries & Allocations	0	0	0	0	0	0	0	0	0	0
Net Expenditure	526	526	0	5	0	0	0	0	531	5
Percent of 2017 Net Expenditure Budg	jet		0.0%	1.0%	0.0%	0.0%	0.0%	0.0%	1.0%	
Revenues By Type										
Federal	0	0	0	0	0	0	0	0	0	0
Provincial	0	0	0	0	0	0	0	0	0	0
Municipal	0	0	0	0	0	0	0	0	0	0
Own Funds	0	0	0	0	0	0	0	0	0	0
Fees and Services	0	0	0	0	0	0	0	0	0	0
Fines	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Total Revenue	0	0	0	0	0	0	0	0	0	0
Percent of 2017 Revenue Budget			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Net Requirement	526	526	0	5	0	0	0	0	531	5
Percent of 2017 Net Requirement Bud	get		0.0%	1.0%	0.0%		0.0%	0.0%	1.0%	
Full Time Equivalents (FTE's)		2.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
Percent of 2017 FTE's			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

#### **City of Ottawa**

Planning, Infrastructure & Economic Development Department Environmental Initiatives - Operating Resource Requirement Explanatory Notes In Thousands (\$000)

	S	urplus / (Defic	cit)	
2017 Forecast vs. Budget Variance Explanation	Expense	Revenue	Net	
No significant variance to report.	0	0	0	
Total Surplus / (Deficit)	0	0	0	
		Increase / (		
2018 Pressure Category / Explanation	Expense	Revenue	Net 2018 Changes	FTE Impact
Maintain Services				
All programs include an adjustment for potential 2018 cost of living, increments and				
benefit adjustments.	5	0	5	0.00
Total Maintain Services	5	0	5	0.00
Total Budget Changes	5	0	5	0.00

In Thousands (\$000)	20	017 Baseline			20	)18 Adjustmo	ents		2018	
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	Council Priorities	Service Initiatives / Savings	User Fees & Revenues	Estimate	\$ Change over 2017 Budget
Expenditures by Program										
Director's Office	827	476	0	5	0		_		481	5
Diversion/Recycling	41,644	41,516	0	548	475	0			42,539	1,023
Graffiti Management	889	659	0	0	0				659	0
Landfill Operations/Disposal	10,744	8,899	0	344	0	0	0		9,243	344
Garbage Collection	14,594	14,895	0	292	300	0	-		15,487	592
Other	419	419	0	6	0	0	-	_	425	6
Solid Waste Non Departmental	5,304	5,747	0	0	0	0	-		5,747	0
Gross Expenditure	74,421	72,611	0	1,195	775	0	0	0	74,581	1,970
Recoveries & Allocations	-2,551	-2,551	0	0	0	0	0	0	-2,551	0
Revenue	-55,425	-50,045	0	0	-425	0	0	-600	-51,070	-1,025
Net Requirement	16,445	20,015	0	1,195	350	0	0	-600	20,960	945
Expenditures by Type										
Salaries, Wages & Benefits	13,346	12,458	0	241	150	0	0	0	12,849	391
Overtime	915	615	0	19	0	0	0	0	634	19
Material & Services	45,503	45,625	0	845	625	0	0	0	47,095	1,470
Transfers/Grants/Financial Charges	4,605	5,327	0	0	0	0	0	0	5,327	0
Fleet Costs	7,915	7,152	0	90	0	0	0	0	7,242	90
Program Facility Costs	0	0	0	0	0	0	0	0	0	0
Other Internal Costs	2,137	1,434	0	0	0	0	0	0	1,434	0
Gross Expenditures	74,421	72,611	0	1,195	775	0	0	0	74,581	1,970
Recoveries & Allocations	-2,551	-2,551	0	0	0	0	0	0	-2,551	0
Net Expenditure	71,870	70,060	0	1,195	775	0	0	0	72,030	1,970
Percent of 2017 Net Expenditure Budg	et	·	0.0%	1.7%	1.1%	0.0%	0.0%	0.0%	2.8%	
Revenues By Type										
Federal	0	0	0	0	0	0	0	0	0	0
Provincial	-6,129	-6,129	0	0	0	0	0	0	-6,129	0
Municipal	0	0	0	0	0	0	0	0	0	0
Own Funds	0	0	0	0	0	0	0	0	0	0
Fees and Services	-49,296	-43,916	0	0	-425	0	0	-600	-44,941	-1,025
Fines	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Total Revenue	-55,425	-50,045	0	0	-425	0	0	-600	-51,070	-1,025
Percent of 2017 Revenue Budget			0.0%		0.8%		0.0%	1.2%	2.0%	
Net Requirement	16,445	20,015	0	1,195	350	0	0	-600	20,960	945
Percent of 2017 Net Requirement Budg	get		0.0%	6.0%	1.7%				4.7%	
Full Time Equivalents (FTE's)		68.40	0.00	0.00	0.00	0.00	0.00	0.00	68.40	0.00
Percent of 2017 FTE's			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

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

	Surplus / (Deficit)				
2017 Forecast vs. Budget Variance Explanation	Expense	Revenue	Net		
Deficit due to higher overtime costs and fleet costs with In House and Landfill Operations,					
offset with increased recycling and soil management revenues.	-1,810	5,380	3,570		
Total Surplus / (Deficit)	-1,810	5,380	3,570		

		Increase / (	Decrease)	
2018 Pressure Category / Explanation	Expense	Revenue	Net 2018 Changes	FTE Impact
Maintain Services				
All programs include an adjustment for potential 2018 cost of living, increments and				
benefit adjustments.	260	0	260	0.00
Contractual inflationary increase to garbage, recycling and green bin collection contracts.	415	0	415	0.00
Contractual inflationary increase to recycling and organics processing contracts.	180	0	180	0.00
Inflationary increase in leachate hauling costs.	250	0	250	0.00
Increase in Fleet costs related to inflation on compensation contracts, parts, fuel,				
contribution to capital reserve and maintenance.	90	0		
Total Maintain Services	1,195	0	1,195	0.00
Growth				
Increase in garbage, recycling and green bin collection contracts due to growth in the				
number of households.	725	0	725	0.00
Increase in recycling processing contract due to growth in tonnage.	50	0	50	0.00
Increase in per household fee revenues due to increase in the number of households.	0	-425		
Total Growth	775	-425	350	0.00
User Fees & Revenues				
See following user fee schedule for details on the specific rates.	0	-600		
Total User Fees & Revenues	0	-600	-600	0.00
Total Budget Changes	1,970	-1,025	945	0.00

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

	20	017 Baseline			20	18 Adjustm	ents		2018	
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	Council Priorities	Service Initiatives / Savings	User Fees & Revenues	Estimate	\$ Change over 2017 Budget
Expenditures by Program										
Forestry Services	18,125	18,125	0	165	0	0	0	0	18,290	165
Gross Expenditure	18,125	18,125	0	165	0	0	0	0	18,290	165
Recoveries & Allocations	0	0	0	0	0	0	0		0	0
Revenue	-45	-45	0	0	0	0	0		-45	0
Net Requirement	18,080	18,080	0	165	0	0	0	0	18,245	165
Expenditures by Type										
Salaries, Wages & Benefits	7,631	7,631	0	147	0	0	0	0	7,778	147
Overtime	165	165	0	3	0	0	0	0	168	3
Material & Services	9,196	9,196	0	0	0	0	0	0	9,196	0
Transfers/Grants/Financial Charges	0	0	0	0	0	0	0	0	0	0
Fleet Costs	1,112	1,112	0	15	0	0	0	0	1,127	15
Program Facility Costs	0	0	0	0	0	0	0	0	0	0
Other Internal Costs	21	21	0	0	0	0	0	0	21	0
Gross Expenditures	18,125	18,125	0	165	0	0	0	0	18,290	165
Recoveries & Allocations	0	0	0	0	0	0	0	0	0	0
Net Expenditure	18,125	18,125	0	165	0	0	0	0	18,290	165
Percent of 2017 Net Expenditure Budg	et		0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.9%	
Revenues By Type										
Federal	0	0	0	0	0	0	0	0	0	0
Provincial	0	0	0	0	0	0	0	0	0	0
Municipal	0	0	0	0	0	0	0	0	0	0
Own Funds	0	0	0	0	0	0	0	0	0	0
Fees and Services	-45	-45	0	0	0	0	0	0	-45	0
Fines	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0
Total Revenue	-45	-45	0	0	0	0	0	0	-45	0
Percent of 2017 Revenue Budget			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Net Requirement	18,080	18,080	0	165	0	0	0	0	18,245	165
Percent of 2017 Net Requirement Budg	get		0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.9%	
Full Time Equivalents (FTE's)		81.32	0.00	0.00	0.00	0.00	0.00	0.00	81.32	0.00
Percent of 2017 FTE's	,		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

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

	Surplus / (Deficit)				
2017 Forecast vs. Budget Variance Explanation	Expense	Revenue	Net		
No significant variance to report.	0	0	0		
Total Surplus / (Deficit)	0	0	0		

		Increase / (I	Decrease)	
2018 Pressure Category / Explanation	Expense	Revenue	Net 2018 Changes	FTE Impact
Maintain Services				
All programs include an adjustment for potential 2018 cost of living, increments and				
benefit adjustments.	150	0	150	0.00
Increase in Fleet costs related to inflation on compensation contracts, parts, fuel,				
contribution to capital reserve and maintenance.	15	0		
Total Maintain Services	165	0	165	0.00
User Fees & Revenues				
See following user fee schedule for details on the specific rates.	0	0	0	0.00
Total User Fees & Revenues	0	0	0	0.00
Total Budget Changes	165	0	165	0.00

## **Capital Budget**

#### City of Ottawa 2018 Draft Capital Budget Environment and Climate Protection Committee-Tax In Thousands (\$000)

Service Area: Environ	Service Area: Environment											
							Debt					
Category	2018 Capital Budget	Revenues	Tax Supported/ Dedicated Reserves	Rate Supported Reserves	Develop. Charges	Gas Tax	Tax/ Dedicated	Rate	Develop. Charges	Gas Tax	Total Debt	
Renewal of City Assets	0	0	0	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	
Strategic Initiatives	2,510	0	2,310	0	0	0	200	0	0	0	200	
Total	2,510	0	2,310	0	0	0	200	0	0	0	200	

In Thousands (\$000)

	Project Inform		Finan	cial Details				
908869	Green Fleet		Class	of Estimate:	Not Applicable	е		
Dept:	Corporate Services Department	Ward:	CW	Year of	f Completion:	2021		
This pro	ovides funding for the Municipal Green Fle	et Plan, which is focussed on support	ing	2018 Request	500	Projected Yeare	nd Unspent Bal.	0
the City	r's commitment to reducing Municipal Gree	en House Gas emissions.		Revenues	0		Debt	
	s supported by the Green Fleet Plan includ d vehicles, primarily light (cars / SUVs) but		ico	Tax Supported/ Dedicated	500		oported/ ed Debt	0
resurfa	,	also specially (bucket trucks, electric		Rate Supported	e Supported 0 Ra		Rate Supported Debt	
<ul> <li>Vehic</li> </ul>	els (ethanol, biodiesel).  le engine technologies (diesel in light fleet)  le engoifications to incorporate reduced fu	· · · · · · · · · · · · · · · · · · ·		Develop. Charges	0	Develor Debt	o. Charges	0
	le specifications to incorporate reduced funities and technology to enhance driver			Gas Tax	0	Gas Ta	x Debt	0
• In-veh	nicle technology to reduce idling and providich do not involve running the engine			Forecast	2018	2019	2020	2021
	provides funding for the Municipal Green F	leet Plan which is focused on supporti	ing	Authority	500	0	0	0
	r's commitment to reducing Municipal Gree	-	Spending Plan	500	0	0	0	
			FTE's	0	0	0	0	
Green	Fleet: \$500.			Operating Impact	0	0	0	0

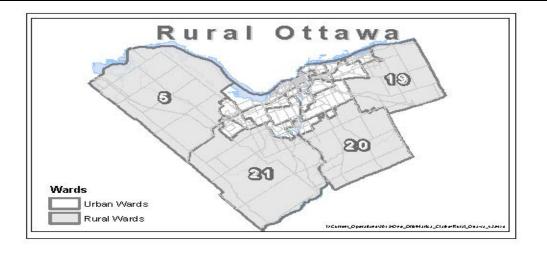
In Thousands (\$000)

in Thou	sands (\$000)							
	Project Inforr	nation			Finan	cial Details		
909109	2018 Natural Area Acquisitions (Urba	n)	Class	of Estimate:	Not Applicable	•		
Dept:	Planning, Infrastructure & Economic Development Department	Category: Strategic Initiatives	Ward	CW	Year of	Completion:	2020	
			-	2018 Request	170	Projected Yeare	nd Unspent Bal.	0
	Policy 5.2.1(5) of the Official Plan, the City			Revenues	0		Debt	
the Cit	I Urban Natural Features, at the request of by to obtain, at the request of the landowner ained from development by the City's natur		Tax Supported/ Dedicated	170		oported/ ed Debt	0	
be dev	velopable. The City employs a variety of mo	luding	Rate Supported	0		pported Debt	0	
metho	t limited to land exchanges and parkland do ds; most acquisitions require funds for purc sments, and legal fees.	er	Develop. Charges	0	Develor Debt	o. Charges	0	
asses	sinents, and legal lees.			Gas Tax	0	Gas Ta	x Debt	0
			Forecast	2018	2019	2020	2021	
				Authority	170	0	0	0
			Spending Plan	170	0	0	0	
			FTE's	0	0	0	0	
				Operating Impact	0	0	0	0
909151	Community Energy Initiatives		Class	of Estimate:	Not Applicable	9		
Dept:	Planning, Infrastructure & Economic Development Department	Category: Strategic Initiatives	Ward	CW	Completion:	2020		
	5, City Council approved Ottawa's Renewa		5-	2018 Request	500	Projected Yeare	nd Unspent Bal.	C
	Γerm of Council strategic initiative. The acti	0 1		Revenues	0		Debt	
of Otta	ed staff to complete a baseline analysis of eawa. This includes assessing options in coll	aboration with community partners.	The	Tax Supported/ Dedicated	500		oported/ ed Debt	0
	for all partners to advance energy conserver generation within their respective areas of		ole	Rate Supported	0	Rate Su	pported Debt	0
	1 focused on energy generation, and will b	2017.	Develop. Charges	0	Develor Debt	o. Charges	0	
	2 work to begin in 2018, will include the de		Gas Tax	0	0 Gas Tax Debt		0	
	gs, transportation, waste and energy storage modeling component will be completed to		Forecast	2018	2019	2020	2021	
	fferent actions, initiatives, and all of the pat		Authority	500	0	0	0	
	sessment report that will be used by the Cit		Spending Plan	500	0	0	0	
	to prioritize efforts over the medium and lo	he	FTE's	0	0	0	0	
	ng of a path forward for Ottawa's low carbo able energy.	n ruture that is powered by clean,		Operating Impact	0	0	0	0

In Thousands (\$000)

	Project Information				Finar	ncial Details		
908894	2018 Rural Area Acquisitions (Rural)		Class	of Estimate:	Not Applicabl	е		
Dept:	Planning, Infrastructure & Economic Development Department	Category: Strategic Initiatives	Ward	CW	Year o	f Completion:	2020	
The Ci	ty's corporate strategic plan supports Bio	as one	2018 Request	340	Projected Yearer	nd Unspent Bal.	0	
	ong-term goals. The Official Plan policy 5	•		Revenues	0		Debt	
purcha	t the request of the landowner. When the se strategic pieces of land in the rural are	s to	Tax Supported/ Dedicated	140		Tax Supported/ Dedicated Debt		
corpora	ant natural areas. The ability to purchase ate long-term strategic goal and Official P	Plan policy. The City normally reco	mally receives Rate Su	Rate Supported	0	Rate Su Debt	pported	0
	I such requests each year. In addition, the tion of other outstanding environmental la	ronmental lands, where opportunities arise.	Dovolop.		0	Develop. Charges Debt		0
				Gas Tax	0	Gas Tax Debt		0
				Forecast	2018	2019	2020	2021
				Authority	340	510	200	200
				Spending Plan	340	510	200	200
				FTE's	0	0	0	0
				Operating				

Impact



0

In Thousands (\$000)

	Project Inforr	nation			Finan	cial Details			
909115	Energy Management & Invest. Strateg	ıy 2018	Class	of Estimate:	Not Applicabl	е			
Dept:	Recreation, Cultural and Facility Operations Department	Category: Strategic Initiatives	Ward	:CW	Year o	f Completion:	2020		
The	and of the management in the management the Oitela			2018 Request	1,000	Projected Yearer	nd Unspent Bal.	0	
_	oal of the program is to manage the City's in the implementation of various energy cor		Revenues	0		Debt			
be und	lertaken to implement capital measures to ater use, with the focus on environmental s		Tax Supported/ Dedicated	1,000		oported/ ed Debt	0		
The F	name Managament and Investment states	ill wad too the City's any improvemental		Rate Supported	0	Rate Supported Debt		0	
footpri		the mandate of the 2009 Green Energy Act		athe Cityle compliance and anthe mondete of the 2000 Cross France Act	Develop. Charges	0	Develop Debt	o. Charges	0
	gement. The Strategy focuses on implement			Gas Tax	0	0 Gas Tax Debt			
	g facilities focusing on lighting, water, heat g envelopes.	ing & cooling, building controls, and		Forecast	2018	2019	2020	2021	
				Authority	1,000	0	0	0	
			Spending Plan	334	333	333	0		
			FTE's	0	0	0	0		
			Operating Impact	0	0	0	0		

#### City of Ottawa 2018 Draft Capital Budget Environment and Climate Protection Committee-Tax In Thousands (\$000)

Service Area: Solid Wa	Service Area: Solid Waste											
									Debt			
Category	2018 Capital Budget	Revenues	Tax Supported/ Dedicated Reserves	Rate Supported Reserves	Develop. Charges	Gas Tax	Tax/ Dedicated	Rate	Develop. Charges	Gas Tax	Total Debt	
Renewal of City Assets	1,650	0	1,650	0	0	0	0	0	0	0	0	
Growth	0	0	0	0	0	0	0	0	0	0	0	
Regulatory	9,079	0	9,079	0	0	0	0	0	0	0	0	
Strategic Initiatives	0	0	0	0	0	0	0	0	0	0	0	
Total	10,729	0	10,729	0	0	0	0	0	0	0	0	

In Thousands (\$000)

	Program In	formation			Fina	ncial Details		
Solid W	/aste Fleet		Class	of Estimate:	A) Pre-Tend	er		
Dept:	Public Works & Environmental Services Department	Category: Renewal of City Assets	Ward:	Multiple	Year o	f Completion:	Various	
		•	•	2018 Request	1,350	Projected Yearer	nd Unspent Bal.	0
	Waste Fleet requires growth to meet the c City grows, Solid Waste realizes expan			Revenues	0		Debt	
increa	se kilometres.			Tax Supported/ Dedicated	1,350	Tax Supporte Dedicated De		0
				Rate Supported	0	Rate Support	ed Debt	0
				Develop. Charges	0	Develop. Cha	rges Debt	0
				Gas Tax	0	Gas Tax Deb	t	0
				Forecast	2018	2019	2020	2021
				Authority	1,350	0	0	0
				Spending Plan	1,350	0	0	0
				FTE's	0	0	0	0
				Operating Impact	0	0	0	0

In Thousands (\$000)

	Project(s) within a Program Information						
908685	Solid Waste Fleet Growth	- Landfill			Class of Estimate: A) Pre-Tender	1,350	
Category:	Renewal of City Assets	Ward: 2	21	Year of Completion:	2022		

Solid Waste is requesting 2018 fleet capital to purchase leased Soil Management equipment at Trail Road. This equipment is required to support the Trail Road Landfill annual and long term needs for processing cover materials and contaminated soils. Solid Waste has been accepting and processing soil since 2015, to meet annual and long term needs up to and including site closure in 2043. When the operating budget was established in 2016, it realized a \$2.6 million surplus. Another operating surplus is forcast for 2017. Solid Waste also realized a \$1.2 million capital savings in 2016, from soil in the stage 1 capping project; and is anticipating future capital savings, as other stages are capped and closed.

In Thousands (\$000)

	Program Inf		Financial Details				
Solid Waste Facilities			Class	ıal			
Dept: Public Works & Environmental Services Department Category: Renewal of City Assets				Multiple	Year o	f Completion: Various	
				2018 Request	300	Projected Yearend Unspent Bal.	0
	Vaste Landfill buildings and structures re le to meet regulatory requirements, as s		Revenues	0	Debt		
	ral. The scalehouse building, leachate cong solutions are necessary over the court		Tax Supported/ Dedicated	300	Tax Supported/ Dedicated Debt	0	

2018 Request	300	Projected Yearend Unspent Bal. (						
Revenues	0		Debt					
Tax Supported/ Dedicated	300		Tax Supported/ Dedicated Debt					
Rate Supported	0	Rate Supported Debt		0				
Develop. Charges	0	Develop. Cha	0					
Gas Tax	0	Gas Tax Debt	Gas Tax Debt					
Forecast	2018	2019	2020	2021				
Authority	300	0	0	0				
Spending Plan	300	0	0					
FTE's	0	0	0					
Operating Impact	0	0	0	0				

In Thousands (\$000)

	Project(s	within a Program Information		\$000's
908013 Trail Road Scalehouse Rel	nabilitation	Class of Estimate:	C) Planning	300
Category: Renewal of City Assets	Ward: 21	Year of Completion: 2018		

The Trail Waste Facility Scale House was constructed in 1986 and has been an essential hub for the operation of the landfill operation and tonnage tracking for numerous private, commercial, and industrial users. Facility uses include landfilling, recycling, and diversion activities totaling approximately 186,000 transactions per year. This project is to address life-cycle replacement and relocation of the existing facility.

In Thousands (\$000)

	Program Information				Financial Details		
Solid W	Solid Waste Landfill Management			of Estimate: D) Conceptual			
Dept:	Public Works & Environmental Services Department	Category: Regulatory	Ward:	Multiple	Year of Completion: Various		
				0040 Dames of	O 070 Projected Vegrand Unapart Dal		

Solid Waste Landfill disposal processing facilities require annual maintenance, repair and upgrades to meet regulatory requirements, as specified in the Provincial Certificate of Approval. Landfill capping of various stages, gas collection systems, leachate collections systems, groundwater containment solutions, and other requirements to keep the landfills operating efficiently, effectively and in compliance.

2018 Request	9,079	Projected Yearer	Projected Yearend Unspent Bal.				
Revenues	0						
Tax Supported/ Dedicated	9,079	Tax Supported Dedicated De	0				
Rate Supported	0	Rate Supporte	0				
Develop. Charges	0	Develop. Cha	0				
Gas Tax	0	Gas Tax Debt	0				
Forecast	2018	2019	2021				
Authority	9,079	10,090	5,384	17,538			
Spending Plan	3,258	15,049 4,719		4,384			
FTE's	0	0	0	0			
Operating Impact	0	0	0	0			

In Thousands (\$000)

Project(s) within a Program Information						
907353 Trail Rd Gas Collect	907353 Trail Rd Gas Collection System Expansion Class of Estimate: D) Conceptual					
Category: Regulatory	Ward: 21	Year of Completion: 2017				

In accordance with the requirements of the Environmental Protection Act, the City of Ottawa is required to prevent the migration of landfill gas to the environment. To this end, the City installed a landfill gas collection and flaring system at the Trail Waste Facility Stages 1, 2 and the Nepean landfill in the early 1990's. The landfill gas collection system was expanded to Stage 3 and 4 and around the perimeter of Stage 1 and Stage 2 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 MOE as a result of exceedance of landfill gas trigger concentrations along the perimeter of the site.

Functions associated with the activity include replacement of the flare, upgrades and repairs to the flare station facility, repairs and expansion of the existing gas collection system, and installation of a permanent gas collection system on completed portions of Stage 2 of the Trail Waste Facility.

New estimated year of completion 2019.

907238 Landfill Disposal Stage 2	Capping	Class of Estimate: D) Conceptual	7,579
Category: Regulatory	Ward: CW	Year of Completion: 2020	

Vertical expansion of the Trail Waste Facility was approved in 2006 as part of an Environmental Assessment (EA) Optimization/Expansion Project. The land filling operation commenced with the vertical expansion of Stage 2 in 2007.

As dictated by the EA, 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, EA/EPA Document". Stage 2 will be filled to final approved contours in early 2013. The design work will start in 2015. During preliminary design, an EA amendment was requested to address waste placed outside of the approved final contours. Due to unanticipated waste settlement, the amendment application is no longer deemed necessary.

Construction will commence in 2017.

907815	Trail Road Landfill - Expan	nsion & Developmer	nt 2015	Class of Estimate: D) Conceptual	250
Category	/: Regulatory	Ward: 21	Year of Completion:	2024	

The Trail Road Landfill operates on a continuous basis for disposal of solid waste material. Annual reinvestment is required to identify and address operational and safety improvements of the site. Required modifications include signage and fencing replacement, material stock pile volume measurements, and associated design and operations reports.

In Thousands (\$000)

Project(s) within a Program Information							
907816	97816 Groundwater Management Class of Estimate: D) Conceptual						
Category:	Regulatory	Ward:	CW	Year of Completion:	2017		

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 consist 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 of the extraction wells (see NGWT Purge Well Rehabilitation Project ESD-SWS-0010) has identified infrastructure failure in force main # 6 and electrical failure associated with underground cable in force main #4 (See Dillon Consulting field reports)

New estimate year of completion 2019.

City Of Ottawa 2018 Capital Draft Budget Environment and Climate Protection Committee-Tax Capital Forecast Summary In Thousands (000's)

Projects by Service Area and Category	2018	2019	2020	2021	Total
Environment					
Strategic Initiatives					
908869 Green Fleet	500	-	-	-	500
908894 2018 Natural Area Acquisitions (Rural)	340	510	200	200	1,250
909109 2018 Natural Area Acquisitions (Urban)	170	-	-	-	170
909151 Community Energy Intitiatives	500	-	-	-	500
909115 Energy Mgmt & Invest. Strategy 2018	1,000	-	-	-	1,000
Strategic Initiatives Total	2,510	510	200	200	3,420
Environment Total	2,510	510	200	200	3,420
Solid Waste					
Renewal of City Assets					
907614 Barnsdale Base Preparation	-	600	600	600	1,800
908013 Trail Road Scalehouse Rehabilitation	300	-	-	-	300
908685 Solid Waste Fleet Growth - Landfill	1,350	-	-	-	1,350
Renewal of City Assets Total	1,650	600	600	600	3,450
Regulatory					
907043 Springhill Site Management	-	-	1,000	-	1,000
907238 Landfill Disposal Stage 2 Capping	7,579	7,579	-	-	15,158
907353 Trail Rd Gas Collection System Expansion	500	500	500	500	2,000
907659 Leachate Recirculation	-	150	-	-	150
907799 Landfill Disposal Stage 5 Development	-	1,011	3,034	16,188	20,233
907815 Trail Road Landfill - Exp & Development	250	250	250	250	1,000
907816 Groundwater Management	750	-	-	-	750
Regulatory Total	9,079	9,490	4,784	16,938	40,291
Strategic Initiatives					
906167 Leachate Treatment Facility	-	5,400	-	-	5,400
Strategic Initiatives Total	-	5,400	-	-	5,400
Solid Waste Total	10,729	15,490	5,384	17,538	49,141
Grand Total	13,239	16,000	5,584	17,738	52,561

City of Ottawa Environment and Climate Protection Committee - Tax Capital Works-In-Progress In Thousands (\$000's)

Project Description	Total Authority	Total Expenditures as of August 31, 2017	Unspent Cash Balance as of August 31, 2017	Total Contractual Obligation	Unspent/ Uncommitted Balance as of August 31, 2017
Environment					
Renewal of City Assets					
908880 Energy Evolution	83	-	83	-	83
Renewal of City Assets Total	83	-	83	-	83
Strategic Initiatives					
905937 2016 Rural Area Acquisitions	1,160	100	1,060	13	1,048
906380 Environmental Strategy	1,500	1,426	74	-	74
906381 AQCCMP Implementation	375	47	328	-	328
907516 S37 Nepean/Metcalfe Streetscaping Proj.	754	672	82	82	0
908017 Green Fleet - 2016	1,222	38	1,184	139	1,046
908881 Canada 150 Maple Grove	31	-	31	-	31
Strategic Initiatives Total	5,042	2,282	2,760	233	2,526
Environment Total	5,125	2,282	2,843	233	2,609
Solid Waste					
Renewal of City Assets					
906535 Bin Collection Conversion	950	739	211	45	166
907353 Trail Rd Gas Collection System Expansion	3,000	961	2,039	361	1,678
907611 Trail Road Stormwater Ponds and Ditches	250	-	250	-	250
907613 Small Load Expansion	300	-	300	-	300
907614 Barnsdale Base Preparation	700	14	686	-	686
907817 Trail Landfill Gas Processing Expansion	200	200	0	-	0
907957 Solid Waste New Operations Centre	18,140	17,971	169	-	169
908013 Trail Road Scalehouse Rehabilitation	1,700	81	1,619	96	1,523
908060 Lifecycle Renewal Fleet - Solid Waste	435	77	358	310	48
Renewal of City Assets Total	25,675	20,043	5,632	813	4,819
Strategic Initiatives					
903801 Solid Waste Fleet Growth Zone 5	600	580	20	-	20
906167 Leachate Treatment Facility	12,500	2,035	10,465	3,232	7,233
907004 Landfill Disposal Stage 1 Capping	14,565	8,308	6,257	427	5,830
907238 Landfill Disposal Stage 2 Capping	1,000	208	792	720	72
907354 Solid Waste Business Technology	1,500	65	1,435	-	1,435

City of Ottawa Environment and Climate Protection Committee - Tax Capital Works-In-Progress In Thousands (\$000's)

Project Description	Total Authority	Total Expenditures as of August 31, 2017	Unspent Cash Balance as of August 31, 2017	Total Contractual Obligation	Unspent/ Uncommitted Balance as of August 31, 2017
907798 Nepean Landfill Gas Collection Rehab	120	-	120	-	120
907815 Trail Road Landfill - Exp & Development	500	28	472	5	467
907816 Groundwater Management	300	213	87	519	(432)
908011 Ottawa Waste Plan Implementation	800	5	795	52	743
908012 Processing & Disposal Technology Review	600	-	600	-	600
Strategic Initiatives Total	32,485	11,443	21,042	4,954	16,087
Solid Waste Total	58,160	31,486	26,674	5,767	20,907
Grand Total	63,285	33,768	29,516	6,000	23,516