

Draft BUDGET 2022

Pathway to recovery: Investing in our people and communities

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

Tabled November 3, 2021



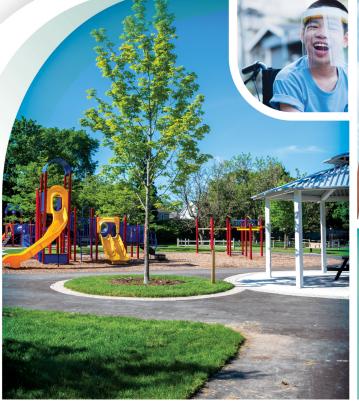




Table of Contents

Standing Committee on Environmental Protection, Water and Waste Management – Tax Supported	
Infrastructure Services	′
Service Area Summary	1
Operating Resource Requirement	2
User Fees	3
Resiliency and Natural Systems Policy	4
Service Area Summary	4
Operating Resource Requirement	6
Solid Waste Services	7
Service Area Summary	7
Operating Resource Requirement	8
User Fees	9
Forestry Services	1
Service Area Summary	1
Operating Resource Requirement	12
User Fees	13
Capital Funding Summary	14
Operating and Capital Supplementry Summaries	16
Infrastructure Services	16
Opearting Analysis	11
Explanatory Note	18
Resiliency and Natural Systems Policy	19
Operating Analysis	19
Explanatory Notes	20
Solid Waste Services	2
Operating Analysis	2

Explanatory Notes	
Forestry Services	
Operating Analysis	
Explanatory Notes	
Capital Budget	
Project Details	29
Environment Services	29
Parks, Buildings, & Grounds Services	
Solid Waste Services	
4 Year Forecast	
Works-In-Progress Listing	47

Planning, Infrastructure and Economic Development Department 2022 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 and investments, 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

Asset Management

- Administer and optimize the lifecycle of municipal infrastructure valued at over \$50 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)

, ,	2020	20	21	2022	
	Actual	Forecast	Budget	Estimate	\$ Change over 2021 Budget
Expenditures by Program					
Director's Office	1,987	814	714	724	10
Quality Management	3,851	3,956	3,956	4,146	190
Special Projects	1,222	987	187	192	5
Design & Construction - Facilities	5,387	5,514	5,314	5,434	120
Design & Construction - Municipal	7,786	8,233	8,533	8,643	110
Asset Management	11,797	10,951	11,751	11,986	235
Gross Expenditure	32,030	30,455	30,455	31,125	670
Recoveries & Allocations	-24,296	-24,619	-24,619	-24,894	-275
Revenue	-68	-16	-16	-16	0
Net Requirement	7,666	5,820	5,820	6,215	395
Expenditures by Type					
Salaries, Wages & Benefits	27,413	27,634	27,634	28,304	670
Overtime	79	245	245	245	0
Material & Services	4,244	2,354	2,354	2,354	0
Transfers/Grants/Financial Charges	0	0	0	0	0
Fleet Costs	119	97	97	97	0
Program Facility Costs	0	0	0	0	0
Other Internal Costs	175	125	125	125	0
Gross Expenditures	32,030	30,455	30,455	31,125	670
Recoveries & Allocations	-24,296	-24,619	-24,619	-24,894	-275
Net Expenditure	7,734	5,836	5,836	6,231	395
Revenues By Type					
Federal	0	0	0	0	0
Provincial	-12	0	0	0	0
Own Funds	0	0	0	0	0
Fees and Services	-56	-16	-16	-16	0
Fines	0	0	0	0	0
Other	0	0	0	0	0
Total Revenue	-68	-16	-16	-16	0
Net Requirement	7,666	5,820	5,820	6,215	395
Full Time Equivalents	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,	215.25	215.25	

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

	2020 Rate \$	2021 Rate \$	2022 Rate \$	% Change Over 2021	% Change Over 2020	Effective Date	2022 Revenue (\$000)
Accident Inspections							
3 hour minimum (hourly rate)	168.00	172.00	175.00	1.7%	4.2%	01-Jan-22	
Any third party charges (cost recovery)	100%	100%	100%	0.0%	0.0%	01-Jan-22	
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-22	
Total Departmental							

Planning, Infrastructure and Economic Development Department 2022 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 opportunities and infrastructure, to managing City assets and investments, to fostering economic prosperity.

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
- Host events, including Wildlife Speaker Series
- Manage City-owned natural areas with community partners.
- Perform development and infrastructure review to ensure environmental considerations are reflected in growth
- · Identify rural natural lands for acquisitions by City

Planning, Infrastructure and Economic Development Department 2022 Service Area Summary – Resiliency and Climate Change

Economic Development and Long-Range Planning – Resiliency and Climate Change 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 and investments, to fostering economic prosperity.

This unit 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 is responsible for the following city-wide initiatives:

- Climate Change Master Plan
- Energy Evolution: Ottawa's Community Energy Transition Strategy
- Climate Projections, Vulnerability and Risk Assessment, and Climate Resiliency Strategy
- Annual Greenhouse Gas Emissions Inventories

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

	2020	20	21	2022		
	Actual	Forecast	Budget	Estimate	\$ Change over 2021 Budget	
Expenditures by Program						
Natural Systems	985	1,172	1,142	1,292	150	
Resiliency & Climate Change	1,101	1,259	889	889	0	
Gross Expenditure	2,086	2,431	2,031	2,181	150	
Recoveries & Allocations	-384	-519	-119	-239	-120	
Revenue	0	0	0	0	0	
Net Requirement	1,702	1,912	1,912	1,942	30	
Expenditures by Type						
Salaries, Wages & Benefits	1,964	2,111	1,711	1,861	150	
Overtime	3	11	11	11	0	
Material & Services	72	257	257	257	0	
Transfers/Grants/Financial Charges	42	52	52	52	0	
Fleet Costs	0	0	0	0	0	
Program Facility Costs	0	0	0	0	0	
Other Internal Costs	5	0	0	0	0	
Gross Expenditures	2,086	2,431	2,031	2,181	150	
Recoveries & Allocations	-384	-519	-119	-239	-120	
Net Expenditure	1,702	1,912	1,912	1,942	30	
Revenues By Type						
Federal	0	0	0	0	0	
Provincial	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	1,702	1,912	1,912	1,942	30	
Full Time Equivalents			12.00	13.00	1.00	

Public Works & Environmental Services Department 2022 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 Solid Waste 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)

III Tilousalius (\$000)	2020	2021		2022		
	Actual	Forecast	Budget	Estimate	\$ Change over 2021 Budget	
Expenditures by Program						
Director's Office	2,607	1,560	510	710	200	
Diversion/Recycling	48,667	52,302	51,914	55,534	3,620	
Graffiti Management	758	815	858	908	50	
Soil Management	1,164	1,283	680	680	0	
Landfill Operations/Disposal	9,784	9,383	8,454	9,654	1,200	
Garbage Collection	21,531	24,406	24,359	25,762	1,403	
Long Term Planning/Other	680	839	913	1,060	147	
Solid Waste Non Departmental	5,747	7,497	7,497	9,442	1,945	
Gross Expenditure	90,938	98,085	95,185	103,750	8,565	
Recoveries & Allocations	-2,578	-3,961	-2,683	-2,683	0	
Revenue	-62,036	-71,760	-63,000	-69,874	-6,874	
Net Requirement	26,324	22,364	29,502	31,193	1,691	
Expenditures by Type						
Salaries, Wages & Benefits	14,541	16,404	15,337	16,002	665	
Overtime	1,298	1,010	710	710	0	
Material & Services	57,547	60,588	58,151	63,986	5,835	
Transfers/Grants/Financial Charges	5,030	6,776	7,076	9,021	1,945	
Fleet Costs	10,963	12,614	12,464	12,584	120	
Program Facility Costs	0	0	0	0	0	
Other Internal Costs	1,559	693	1,447	1,447	0	
Gross Expenditures	90,938	98,085	95,185	103,750	8,565	
Recoveries & Allocations	-2,578	-3,961	-2,683	-2,683	0	
Net Expenditure	88,360	94,124	92,502	101,067	8,565	
Revenues By Type						
Federal	0	0	0	0	0	
Provincial	-9,255	-8,478	-5,824	-7,153	-1,329	
Own Funds	0	0	0	0	0	
Fees and Services	-52,781	-63,282	-57,176	-62,721	-5,545	
Fines	0	0	0	0	0	
Other	0	0	0	0	0	
Total Revenue	-62,036	-71,760	-63,000	-69,874	-6,874	
Net Requirement	26,324	22,364	29,502	31,193	· ·	
Full Time Equivalents		·	75.40	75.40	0.00	

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

Solid Waste Services - Oser Fees	2020 Rate \$	2021 Rate \$	2022 Rate \$	% Change Over 2021	% Change Over 2020	Effective Date	2022 Revenue (\$000)
Solid Waste - User Fees							-4,275
Single Family Household	96.00	106.00	118.00	11.3%	22.9%	01-Jan-22	
Multi Residential Household	56.50	71.50	77.50	8.4%	37.2%	01-Jan-22	
Yellow Bag per bag fee	4.00	4.10	4.20	2.4%	5.0%	01-Jan-22	
Landfill Operations - Tipping Fees							-25
Waste Materials							
Garbage <=100 kg (minimum) Includes soil mixed with							
concrete	11.40	11.65	11.90	2.1%	4.4%	01-Jan-22	
Garbage >100 kg (per tonne) Includes soil mixed with							
concrete	114.00	116.50	119.00	2.1%	4.4%	01-Jan-22	
Mixed garbage & recyclable material <=250 kg (minimum)	57.00	58.25	59.50	2.1%	4.4%	01-Jan-22	
Mixed garbage & recyclable material >250 kg (per tonne)	228.00	233.00	238.00	2.1%	4.4%	01-Jan-22	
Asbestos <=250 kg per load flat rate (minimum)	126.00	128.75	132.00	2.5%	4.8%	01-Jan-22	
Asbestos >250 kg (per tonne)	504.00	515.00	528.00	2.5%	4.8%	01-Jan-22	
Diversion Program - Clean Loads							
Metal /Tires	Free	Free	Free	N/A	N/A	N/A	
E-waste	Free	Free	Free	N/A	N/A	N/A	
Blue Box Material	Free	Free	Free	N/A	N/A	N/A	
Cardboard <=100 kg (minimum)	5.50	5.60	5.70	1.8%	3.6%	01-Jan-22	
Cardboard >100 kg (per tonne)	55.00	56.00	57.00	1.8%	3.6%	01-Jan-22	
Leaf and Yard Waste under 10 cm in diameter <=100 kg							
(minimum)	3.85	3.95	4.05	2.5%	5.2%	01-Jan-22	
Leaf and Yard Waste >100 kg (per tonne)	38.50	39.50	40.50	2.5%	5.2%	01-Jan-22	
Soil/Fill <=200 kg (minimum) (Top soil, sand, sod)	5.60	5.70	11.40	100.0%	103.6%	01-Jan-22	
Soil/Fill >200 kg (per tonne) (Top soil, sand, sod)	28.00	28.50	57.00	100.0%	103.6%	01-Jan-22	
Fill <=200 kg (per tonne) (Asphalt, masonry, concrete	5 66	44.00	44.40	4.00/	400.004	0.4 1 00	
without rebar)	5.60	11.20	11.40	1.8%	103.6%	01-Jan-22	

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

	2020 Rate \$	2021 Rate \$	2022 Rate \$	% Change Over 2021	% Change Over 2020	Effective Date	2022 Revenue (\$000)
Fill >200 kg (per tonne) (Asphalt, masonry, concrete							
without rebar)	28.00	56.00	57.00	1.8%	103.6%	01-Jan-22	
Woodchips <=200 kg (minimum)	5.70	7.90	8.10	2.5%	42.1%	01-Jan-22	
Woodchips >200 kg (per tonne)	28.50	39.50	40.50	2.5%	42.1%	01-Jan-22	
Retail Materials Program							
Municipal Potting Soil <=200 kg (minimum)	8.40	8.60	8.80	2.3%	4.8%	01-Jan-22	
Municipal Potting Soil >200 kg (per tonne)	42.00	43.00	44.00	2.3%	4.8%	01-Jan-22	
Total Departmental							-4,300

Public Works & Environmental Services Department 2022 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, and stumping activities
- Invasive pest management (ex. Emerald Ash Borer and Dutch Elm Disease)
- Tree protection and tree by-law enforcement including Tree Removal Permits
- 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)

· ·	2020	20	21	2022		
	Actual	Forecast	Budget	Estimate	\$ Change over 2021 Budget	
Expenditures by Program						
Forestry Services	17,769		19,889	20,284		
Gross Expenditure	17,769	18,325	19,889	20,284	395	
Recoveries & Allocations	-171	0	0	0	0	
Revenue	1,197	-1,280	-631	-631	0	
Net Requirement	18,795	17,045	19,258	19,653	395	
Expenditures by Type						
Salaries, Wages & Benefits	8,403	8,849	9,012	9,329	317	
Overtime	181	120	180	183	3	
Material & Services	7,643	7,817	9,321	9,366	45	
Transfers/Grants/Financial Charges	0	0	0	0	0	
Fleet Costs	1,372	1,501	1,347	1,377	30	
Program Facility Costs	0	0	0	0	0	
Other Internal Costs	170	38	29	29	0	
Gross Expenditures	17,769	18,325	19,889	20,284	395	
Recoveries & Allocations	-171	0	0	0	0	
Net Expenditure	17,598	18,325	19,889	20,284	395	
Revenues By Type						
Federal	0	0	0	0	0	
Provincial	1,630	0	0	0	0	
Own Funds	0	0	0	0	0	
Fees and Services	-433	-1,280	-631	-631	0	
Fines	0	0	0	0	0	
Other	0	0	0	0	0	
Total Revenue	1,197	-1,280	-631	-631	0	
Net Requirement	18,795	17,045	19,258	19,653	395	
Full Time Equivalents			84.32	87.32	3.00	

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

	2020 Rate \$	2021 Rate \$	2022 Rate \$	% Change Over 2021	% Change Over 2020	Effective Date	2022 Revenue (\$000)
Application fee for Distinctive Tree Permit as per Tree Protection By-law (bylaw # TBD). Fee applies to applications where no development is taking place. For properties one hectare or less in size, and multi- residential properties of all sizes, if a landowner wants to remove a private tree that is equal to or greater than 50cm DBH within the urban boundary or equal to or greater than 30cm DBH within the inner urban area or any city-owned tree, they must obtain a Distinctive Tree Permit from the City.	N/A	150.00	150.00	0.0%	N/A	01-Jan-22	
Application fee for Distinctive Tree Permit as per Tree Protection By-law (bylaw # TBD). Fee applies to applications where infill development is taking place. For properties one hectare or less in size, and multi- residential properties of all sizes, if a landowner wants to remove a tree that is equal to or greater than 50cm DBH within the urban boundary or equal to or greater than 30cm DBH within the inner urban area or any city-owned tree, they must obtain a Distinctive Tree Permit from the City.	N/A	500.00	500.00	0.0%	N/A	01-Jan-22	
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%	0.0%	0.0%	01-Jan-22	

City Of Ottawa
2022 Draft Capital Budget
Standing Committee on Environmental Protection, Water and Waste Management - Tax
Capital Funding Summary
In Thousands \$(000's)

In Thousands \$(000's)						
Project Description	Revenues	Gas Tax	Tax Supported/ Dedicated	Develop. Charges	Tax Supported/ Dedicated Debt	Grand Total
Environment						
Service Enhancements						
908894 Natural Area Acquisitions (Rural)	0	0	2,000	0	0	2,000
910568 Energy Management & Invest Strategy 2022	0	0	2,500	0	500	3,000
Service Enhancements Total	0	0	4,500	0	500	5,000
For the own out Total	0	0	4 500	0	500	5 000
Environment Total	0	0	4,500	0	500	5,000
Parks, Buildings, & Grounds						
Renewal of City Assets						
910479 Forestry - Concrete Tree Well Covers	0	0	400	0	0	400
Renewal of City Assets Total	0	0	400	0	0	400
Parks, Buildings, & Grounds Total	0	0	400	0	0	400
Solid Waste						
Renewal of City Assets						
906167 Leachate Treatment Facility	0	0	0	0	1,000	1,000
909430 Nepean Landfill Cap Repair	0	0	1,500	0	0	1,500
909894 Trail Road Groundwater Management	0	0	1,000	0	0	1,000
910585 Soil Management Facility	0	0	1,000	0	0	1,000
910586 Renewal of SW Facilities	0	0	500	0	0	500
Renewal of City Assets Total	0	0	4,000	0	1,000	5,000
Growth	0.1	0.1	000	0.1	0	600
909627 Solid Waste Fleet Growth	0	0	620	0	0	620 620
Growth Total	0	0	620	0	0	620
Regulatory						
907614 Barnsdale Base Preparation	0	0	1,000	0	0	1,000
907799 Landfill Disposal Stage 5 Development	0	0	0	0	18,000	18,000
910199 Trail Road Landfill - Expansion & Development	0	0	950	0	0	950
910210 Trail Road Gas Collection System Expansion	0	0	1,000	0	0	1,000
Regulatory Total	0	0	2,950	0	18,000	20,950

City Of Ottawa
2022 Draft Capital Budget
Standing Committee on Environmental Protection, Water and Waste Management - Tax
Capital Funding Summary
In Thousands \$(000's)

Project Description	Revenues	Gas Tax	Tax Supported/ Dedicated	Develop. Charges	Tax Supported/ Dedicated Debt	Grand Total
Service Enhancements						
909431 Long Term Planning	0	0	1,925	0	0	1,925
Service Enhancements Total	0	0	1,925	0	0	1,925
Solid Waste Total	0	0	9,495	0	19,000	28,495
Grand Total	0	0	14,395	0	19,500	33,895

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

	2	021 Baseline)		202	2 Adjustr	nents		2022	
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	COVID- 19	Service Initiatives / Savings	User Fees & Revenues	Estimate	\$ Change over 2021 Budget
Expenditures by Program										
Director's Office	814	714	0	10	0	0	0	0	724	10
Quality Management	3,956	3,956	0	55	135	0	0	0	4,146	190
Special Projects	987	187	0	5	0	0	0	0	192	5
Design & Construction - Facilities	5,514	5,314	0	120	0	0	0	0	5,434	120
Design & Construction -										
Municipal	8,233	8,533	0	110	0	0	0	0	8,643	110
Asset Management	10,951	11,751	0	235	0	0	0	0	11,986	235
Gross Expenditure	30,455	30,455	0	535	135	0	0	0	31,125	670
Recoveries & Allocations	-24,619	-24,619	0	-140	-135	0	0	0	-24,894	-275
Revenue	-16	-16	0	0	0	0	0	0	-16	0
Net Requirement	5,820	5,820	0	395	0	0	0	0	6,215	395
Expenditures by Type										
Salaries, Wages & Benefits	27,634	27,634	0	535	135	0	0	0	28,304	670
Overtime	245	245	0	0	0	0	0	0	245	0
Material & Services	2,354	2,354	0	0	0	0	0	0	2,354	0
Transfers/Grants/Financial Charge	0	0	0	0	0	0	0	0	0	0
Fleet Costs	97	97	0	0	0	0	0	0	97	0
Program Facility Costs	0	0	0	0	0	0	0	0	0	0
Other Internal Costs	125	125	0	0	0	0	0	0	125	0
Gross Expenditures	30,455	30,455	0	535	135	0	0	0	31,125	670
Recoveries & Allocations	-24,619	-24,619	0	-140	-135	0	0	0	-24,894	-275
Net Expenditure	5,836	5,836	0	395	0	0	0	0	6,231	395
Percent of 2022 Net Expenditure E	Budget		0.0%	6.8%	0.0%	0.0%	0.0%	0.0%	6.8%	

City of Ottawa

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

	2	021 Baseline	•		202	2 Adjustn	nents		2022	
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	COVID- 19	Service Initiatives / Savings	User Fees & Revenues	Estimate	\$ Change over 2021 Budget
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
Own Funds	0	0	0	0	0	0	0	0	0	0
Fees and Services	-16	-16	0	0	0	0	0	0	-16	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	-16	-16	0	0	0	0	0	0	-16	0
Percent of 2022 Revenue Budget			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Net Requirement	5,820	5,820	0	395	0	0	0	0	6,215	395
Percent of 2022 Net Requirement	Budget		0.0%	6.8%	0.0%	0.0%	0.0%	0.0%	6.8%	
Full Time Equivalents (FTE's)		215.25	0.00	0.00	0.00	0.00	0.00	0.00	215.25	0.00
Percent of 2022 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)

	Sı	ırplus / (Defic	it)
2021 Forecast vs. Budget Variance Explanation	Expense	Revenue	Net
No significant variances to report.	0	0	0
Total Surplus / (Deficit)	0	0	0

		Increase / (Decrease)	
2022 Pressure Category / Explanation	Expense	Revenue	Net 2022 Changes	FTE Impact
Maintain Services				
All programs include an adjustment for potential 2022 cost of living, increments and benefit adjustments.	535	0	535	0.00
All programs include an adjustment for potential 2022 cost of living, increments and				
benefit adjustments - offset with recoveries and allocations.	-140	0	-140	0.00
Total Maintain Services	395	0	395	0.00
Growth				
A resource (1 temporary position) is required to administer the various COVID-19				
infrastructure funding stream agreement requirements. New funding streams have been				
created to support the pandemic response and economic recovery. Funded by				
recoveries and allocations.	135	0	135	0.00
A resource (1 temporary position) is required to administer the various COVID-19				
infrastructure funding stream agreement requirements. New funding streams have been				
created to support the pandemic response and economic recovery. Offset with				
recoveries and allocations.	-135	0	-135	0.00
Total Growth	0	0	0	0.00
Total Budget Changes	395	0	395	0.00

City of Ottawa Planning, Infrastructure & Economic Development Department Resiliency and Natural Systems Policy - Operating Resource Requirement Analysis

In Thousands (\$000)

In Thousands (\$000)	_2	021 Baseline			2022 Ad	justments		2022	
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	COVID-19	User Fees & Revenues	Estimate	\$ Change over 2021 Budget
Expenditures by Program									
Natural Systems	1,172	1,142	0	30	120	0	0	1,292	150
Resiliency & Climate Change	1,259	889	0	0	0	0	0	889	0
Gross Expenditure	2,431	2,031	0	30	120	0	0	2,181	150
Recoveries & Allocations	-519	-119	0	0	-120	0	0	-239	-120
Revenue	0	0	0	0	0	0	0	0	0
Net Requirement	1,912	1,912	0	30	0	0	0	1,942	30
Expenditures by Type									
Salaries, Wages & Benefits	2,111	1,711	0	30	120	0	0	1,861	150
Overtime	11	11	0	0	0		0	11	0
Material & Services	257	257	0	0	0	0	0	257	0
Transfers/Grants/Financial Charges	52	52	0	0	0	0	0	52	0
Fleet Costs	0	0	0	0	0	0	0	0	0
Program Facility Costs	0	0	0	0	0	0	0	0	0
Other Internal Costs	0	0	0	0	0	-	0	0	0
Gross Expenditures	2,431	2,031	0	30	120	0	0	2,181	150
Recoveries & Allocations	-519	-119	0	0	-120	0	0	-239	-120
Net Expenditure	1,912	1,912	0	30	0	0	0	1,942	30
Percent of 2022 Net Expenditure Budge	et		0.0%	1.6%	0.0%	0.0%	0.0%	1.6%	
Revenues By Type									
Federal	0	0	0	0	0	0	0	0	0
Provincial	0	0	0	0	0	0	0	0	0
Own Funds	0	0	0	0	0	0	0	0	0
Fees and Services	0	0	0	0	0	0	0	0	0
Fines	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0
Total Revenue	0	0	0	0	0	0	0	0	0
Percent of 2022 Revenue Budget			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Net Requirement	1,912	1,912	0	30	0	0	0	1,942	30
Percent of 2022 Net Requirement Budg	et		0.0%	1.6%	0.0%		0.0%	1.6%	
Full Time Equivalents (FTE's)		12.00	0.00	1.00	0.00	0.00	0.00	13.00	1.00
Percent of 2022 FTE's			0.0%	8.3%	0.0%	0.0%	0.0%	8.3%	

City of Ottawa

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

	Surplus / (Deficit)					
2021 Forecast vs. Budget Variance Explanation	Expense	Revenue	Net			
No significant variances to report.	0	0	0			
Total Surplus / (Deficit)	0	0	0			
		Increase / (Decrease)				
2022 Pressure Category / Explanation	Expense	Revenue	Net 2022			

		Increase / (Decrease)	
2022 Pressure Category / Explanation	Expense	Revenue	Net 2022 Changes	FTE Impact
Maintain Services				
All programs include an adjustment for potential 2022 cost of living, increments and				
benefit adjustments.	30	0	30	0.00
Resources to support the Tree Protection By-law (ACS2019-PIE-EDP-0052 Tree By-law				
Review Project carried by Council on January 29, 2020). The budget pressure is twofold;				
to make permanent the temporary forester position (position only, as funds were secured				
in 2021) and to acquire one additional temporary forester to support implementation of				
the Urban Forest Management Plan. Funded through Planning Services User Fee				
revenues.	120	0	120	1.00
Resources to support the Tree Protection By-law (ACS2019-PIE-EDP-0052 Tree By-law				
Review Project carried by Council on January 29, 2020). The budget pressure is twofold;				
to make permanent the temporary forester position (position only, as funds were secured				
in 2021) and to acquire one additional temporary forester to support implementation of				
the Urban Forest Management Plan. Offset with Planning Services User Fee revenues.				
	-120	0	-120	0.00
Total Maintain Services	30	0	30	1.00
Total Budget Changes	30	0	30	1.00

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

	2	021 Baselin	е			2022 Ad	ljustments			2022	
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Provincial Legislated	Growth	COVID-19	Service Initiatives / Savings	User Fees & Revenues	Estimate	\$ Change over 2021 Budget
Expenditures by Program											
Director's Office	1,560	510	0	75	0	0	0	125	0	710	200
Diversion/Recycling	52,302	51,914	300	2,020	0	600	700	0	0	55,534	3,620
Graffiti Management	815	858	0	50	0	0	0	0	0	908	50
Soil Management	1,283	680	0	0	0	0	0	0	0	680	0
Landfill Operations/Disposal	9,383	8,454	405	695	100	0	0	0	0	9,654	1,200
Garbage Collection	24,406	24,359	150	1,253	0	0	0	0	0	25,762	1,403
Long Term Planning/Other	839	913	0	147	0	0	0	0	0	1,060	147
Solid Waste Non Departmental	7,497	7,497	0	1,945	0	0	0	0	0	9,442	1,945
Gross Expenditure	98,085	95,185	855	6,185	100	600	700	125	0	103,750	8,565
Recoveries & Allocations	-3,961	-2,683	0	0	0	0	0	0	0	-2,683	0
Revenue	-71,760	-63,000	0	-1,879	0	-695	0	0	-4,300	-69,874	-6,874
Net Requirement	22,364	29,502	855	4,306	100	-95	700	125	-4,300	31,193	1,691
Expenditures by Type											
Salaries, Wages & Benefits	16,404	15,337	0	440	100	0	0	125	0	16,002	665
Overtime	1,010	710	0	0	0	0	0	0	0	710	0
Material & Services	60,588	58,151	855	3,680	0	600	700	0	0	63,986	5,835
Transfers/Grants/Financial Charges	6,776	7,076	0	1,945	0	0	0	0	0	9,021	1,945
Fleet Costs	12,614	12,464	0	120	0	0	0	0	0	12,584	120
Program Facility Costs	0	0	0	0	0	0	0	0	0	0	0
Other Internal Costs	693	1,447	0	0	0	0	0	0	0	1,447	0
Gross Expenditures	98,085	95,185	855	6,185	100	600	700	125	0	103,750	8,565
Recoveries & Allocations	-3,961	-2,683	0	0	0	0	0	0	0	-2,683	0
Net Expenditure	94,124	92,502	855	6,185	100	600	700	125	0	101,067	8,565
Percent of 2022 Net Expenditure Bud	dget		0.9%	6.7%	0.1%	0.6%	0.8%	0.1%	0.0%	9.3%	

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

Thousands (\$555)	20	021 Baselin	е			2022 Ac	ljustments			2022	
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Provincial Legislated	Growth	COVID-19	Service Initiatives / Savings	User Fees & Revenues	Estimate	\$ Change over 2021 Budget
Revenues By Type											
Federal	0	0	0	0	0	0	0	0	0	0	0
Provincial	-8,478	-5,824	0	-1,329	0	0	0	0	0	-7,153	-1,329
Own Funds	0	0	0	0	0	0	0	0	0	0	0
Fees and Services	-63,282	-57,176	0	-550	0	-695	0	0	-4,300	-62,721	-5,545
Fines	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total Revenue	-71,760	-63,000	0	-1,879	0	-695	0	0	-4,300	-69,874	-6,874
Percent of 2022 Revenue Budget			0.0%	3.0%	0.0%	1.1%	0.0%	0.0%	6.8%	10.9%	
Net Requirement	22,364	29,502	855	4,306	100	-95	700	125	-4,300	31,193	1,691
Percent of 2022 Net Requirement Bu	ıdget		2.9%	14.6%	0.3%	-0.3%	2.4%	0.4%	-14.6%	5.7%	
Full Time Equivalents (FTE's)		75.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75.40	0.00
Percent of 2022 FTE's			0.0%	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)				
2021 Forecast vs. Budget Variance Explanation	Expense	Revenue	Net		
Surplus due to increase revenues from recycling markets and funding for the Blue/Black					
Box Program, slightly offset by increased collection and processing costs due to increased					
tonnage	-1,622	-,	,		
Total Surplus / (Deficit)	-1,622	8,760	7,138		

		Increase / (I	Increase / (Decrease)				
2021 Baseline Adjustment / Explanation	Expense	Revenue	Net 2022 Changes	FTE Impact			
Increased landfill operating and monitoring costs to reflect actual spending	405	0	405	0.00			
On street waste collection cost increase and to reflect actual spending	150	0	150	0.00			
Delivery of blue, black and green bins to residents to reflect actual spending and							
increased demand.	300	0	300	0.00			
Total Adjustments to Base Budget	855	0	855	0.00			

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

		Increase / (I	Decrease)	
2022 Pressure Category / Explanation	Expense	Revenue	Net 2022 Changes	FTE Impact
Maintain Services				
All programs include an adjustment for potential 2022 cost of living, increments and benefit adjustments.	440	0	440	0.00
Inflationary increase to curbside and multi residential garbage, recycling and green bin collection contracts.	2,930	0	2,930	0.00
Inflationary increase to recycling and organics processing contracts.	370	0	370	0.00
Increase in Fleet costs related to inflation on compensation contracts, parts, fuel, contribution to capital reserve and maintenance.	120	0	120	0.00
Inflationary increase to leachate treatment and hauling costs.	300	0	300	0.00
Increase in landfill cover system costs.	80	0	80	0.00
Increase to the Pay As You Go contribution to the Solid Waste Capital Reserve Fund	4.045	0	4.045	0.00
Elimination of the Springhill Landfill royalty due to closure of the landfill.	1,945 0	0 300	1,945 300	0.00
Elimination of residuals revenue due to processing contract changes.	0	150	150	0.00
Increase in recycling market revenues as a result of increased tonnage and favorable commodity prices	0	-1,000	-1,000	0.00
Increase in funding from the Resource Productivity and Recovery Authority for the Blue/Black Box Program	0	-1,400	-1,400	0.00
Reduction in the funding from the Resource Productivity and Recovery Authority for the Household Special Waste Depots	0	71	71	0.00
Total Maintain Services	6,185	-1,879	4,306	0.00
Provincial Legislated				
Compensation funding for a temporary FTE to administer operational impacts of new				
regulations regarding soils management	100	0	100	0.00
Total Provincial Legislated	100	0	100	0.00

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

		Increase / (Decrease)					
2022 Pressure Category / Explanation	Expense	Revenue	Net 2022 Changes	FTE Impact			
Growth							
Organics processing costs increase due to increased tonnage	550	0	550	0.00			
Leaf and Yard costs increase due to increased diversion and tonnage.	50	0	50	0.00			
Increase in per household revenues due to growth in the number of households	0	-695		0.00			
Total Growth	600	-695	-95	0.00			
COVID-19							
Organics processing costs increase due to increased tonnage from stay home	700		700				
Total COVID-19	700	0	700	0.00			
		Increase / (Decrease)					
2022 Pressure Category / Explanation	Expense	Revenue	Net 2022 Changes	FTE Impact			
Service Initiatives / Savings							
Compensation funding for a temporary FTE to support residuals and organics							
management	125	0	125	0.00			
Total Service Initiatives / Savings	125	0	125	0.00			
User Fees & Revenues							
See following user fee schedule for details on the specific rates.	0	-4,300	-4,300	0.00			
Total User Fees & Revenues	0	-4,300	-4,300	0.00			
Total Budget Changes	8,565	-6,874	1,691	0.00			

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

	2(021 Baseline	<u> </u>		2022 Ad	justments		2022	
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	COVID-19	User Fees & Revenues	Estimate	\$ Change over 2021 Budget
Expenditures by Program									
Forestry Services	18,325	19,889	0	225	170	0	0	20,284	395
Gross Expenditure	18,325	19,889	0	225	170	0	0	20,284	395
Recoveries & Allocations	0	0	0	0	0	0	0	0	0
Revenue	-1,280	-631	0	0	0	0	0	-631	0
Net Requirement	17,045	19,258	0	225	170	0	0	19,653	395
Expenditures by Type									
Salaries, Wages & Benefits	8,849	9,012	0	192	125	0	0	9,329	317
Overtime	120	180	0	3	0	0	0	183	3
Material & Services	7,817	9,321	0	0	45	0	0	9,366	45
Transfers/Grants/Financial Charges	0	0	0	0	0	0	0	0	0
Fleet Costs	1,501	1,347	0	30	0	0	0	1,377	30
Program Facility Costs	0	0	0	0	0	0	0	0	0
Other Internal Costs	38	29	0	0	0	0	0	29	0
Gross Expenditures	18,325	19,889	0	225	170	0	0	20,284	395
Recoveries & Allocations	0	0	0	0	0	0	0	0	0
Net Expenditure	18,325	19,889	0	225	170	0	0	20,284	395
Percent of 2022 Net Expenditure Budg	et		0.0%	1.1%	0.9%	0.0%	0.0%	2.0%	
Revenues By Type									
Federal	0	0	0	0	0	0	_	0	0
Provincial	0	0	0	0	0	0	0	0	0
Own Funds	0	0	0	0	0	· ·	0	0	0
Fees and Services	-1,280	-631	0	0	0	0	0	-631	0
Fines	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0
Total Revenue	-1,280	-631	0	0	0	0	0	-631	0
Percent of 2022 Revenue Budget			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Net Requirement	17,045	19,258	0	225	170	0	0	19,653	395
Percent of 2022 Net Requirement Budg	get		0.0%	1.2%	0.9%	0.0%	0.0%	2.1%	
Full Time Equivalents (FTE's)		84.32	0.00	0.00	3.00	0.00	0.00	87.32	3.00
Percent of 2022 FTE's			0.0%	0.0%	3.6%	0.0%	0.0%	3.6%	

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

In Thousands (\$000)				
	Sı			
2021 Forecast vs. Budget Variance Explanation	Expense	Revenue	Net	
Savings mainly due to reduced maintenance following weather events and increased tree permit revenues	1,564	649	2,213	
Total Surplus / (Deficit)	1,564	649		
		Increase / (Decrease)	
2022 Pressure Category / Explanation	Expense	Revenue	Net 2022 Changes	FTE Impact
Maintain Services				
All programs include an adjustment for potential 2021 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.	30	0	30	0.00
Total Maintain Services	225	0		0.00
		Increase / (Decrease)	
2022 Pressure Category / Explanation	Expense	Revenue	Net 2022 Changes	FTE Impact
Growth Requirement for compensation funding for temporary Forestry Stewardship FTE and increased operational requirement to support implementation of outreach/programming related to Gypsy Moth as directed by motion at SCEPWWM on June 29 as well as per				

2022 Pressure Category / Explanation	Expense	Revenue	Changes	Impact
Growth				
Requirement for compensation funding for temporary Forestry Stewardship FTE and increased operational requirement to support implementation of outreach/programming related to Gypsy Moth as directed by motion at SCEPWWM on June 29 as well as per recommendation of the Council approved Urban Forest Management Plan.				
	125	0	125	0.00
Fleet operating costs for 3 new vehicles for 3 Inspectors, one approved in 2020 and two				
to be converted from temporary to permanent.	45	0	45	0.00
Conversion of 3 temporary Forestry Inspector positions into permanent positions to support the changes to the Tree By-Law approved by Council which took effect in January 2021. Compensation funding was approved in the the 2021 budget.				
	0	0		3.00
Total Growth	170	0	170	3.00
Total Budget Changes	395	0	395	3.00

Capital Budget

City of Ottawa 2022 Draft Capital Budget Environment and Climate Protection Committee-Tax In Thousands (\$000)

Service Area: Environment											
									Debt		
Category	2022 Draft 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	О	0	0
Regulatory	0	0	0	0	0	0	0	0	0	0	0
Service Enhancements	5,000	0	4,500	0	0	0	500	0	0	0	500
Total	5,000	0	4,500	0	0	0	500	0	0	0	500

City of Ottawa 2022 Draft Capital Budget Service Area: Environment

In Thousands (\$000)

	Project Inform	mation			Finan	cial Details		
908894	Rural Area Acquisitions (Rural)		Class	of Estimate:	Not Applicabl	е		
Dept:	Planning, Infrastructure & Economic Development Department	Category: Service Enhancements	Ward	CW	Year o	f Completion:	2022	
			•	2022 Request	2,000	Projected Yearer	nd Unspent Bal.	0
	ty's 2019 - 2022 Strategic Plan identifies E	•		Revenues	0		Debt	
Plan po	es, including the protection and enhancemental states of the state of the states of th	City to secure and conserve importan		Tax Supported/ Dedicated	2,000	Tax Supported Debt	d/ Dedicated	0
agreem	paces through a variety of means, including but not limited to management nents, partnerships, and acquisitions. In some cases, the City may be obliged to se land at the request of the owner. The City normally receives several such			Rate Supported	0 Rate Sup		ed Debt	0
request	ts each year. Funding for environmental la	each year. Funding for environmental land conservation and acquisition fulfills rporate long-term strategic goal and Official Plan policy.	lls	Develop. Charges	0	Develop. Char	rges Debt	0
			Gas Tax		Gas Tax	0	Gas Tax Debt	
New ye	ear of completion is 2026.	of completion is 2026.			2022	2023	2024	2025
				Authority	2,000	2,000	2,000	2,000
			Spending Plan	2,000	1,000	1,500	200	
				FTE's	0	0	0	0
				Operating Impact	0	0	0	0

City of Ottawa 2022 Draft Capital Budget Service Area: Environment

In Thousands (\$000)

	Project Inforr	Financial Details						
910568	Energy Management & Invest. Strateg	Class	of Estimate:	е				
Dept:	Recreation, Cultural and Facility Operations Department	Category: Service Enhancements	Ward:	CW	CW Year of Completic			
			2022 Request	3,000	Projected Yeare	nd Unspent Bal.	0	
	ergy Management Investment Strategy is			Revenues	0		Debt	
	in demand for energy through the implements in City facilities.	on	Tax Supported/ Dedicated	2,500	Tax Supporte Debt	d/ Dedicated	500	
	ergy Management Investment strategy wil the City's compliance under the mandate	tprint,	Rate Supported	0 Rate Supported Debt		ed Debt	0	
continu manag	ue the City's leadership role in respect to energy conservation and demand Develorment.				0	Develop. Cha	rges Debt	0
				Gas Tax 0 Gas Tax Debt				0
	on will be invested into various facility enh			Forecast	2022	2023	2024	2025
	g energy intensity, energy costs and green ed to have an average payback of 8 years.	energy intensity, energy costs and greenhouse gas emissions. The measures are d to have an average payback of 8 years.			3,000	3,000	3,000	3,000
				Spending Plan	3,000	3,000	3,000	3,000
					0	0	0	0
				Operating Impact	0	0	0	0

City of Ottawa 2022 Draft Capital Budget Environment and Climate Protection Committee-Tax In Thousands (\$000)

Service Area: Parks, Buildings, & Grounds											
							Debt				
Category	2022 Draft 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	400	0	400	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	0	0	0	0	0	0	0	0	0	0	0
Total	400	0	400	0	0	0	0	0	0	0	0

City of Ottawa 2022 Draft Capital Budget

Service Area: Parks, Buildings, & Grounds

	Project Inforr	nation	Financial Details					
910479	Forestry - Concrete Tree Well Covers	Redesign & Replacement	Class	of Estimate:	B) Design			
Dept:	Public Works & Environmental Services Department	Category: Renewal of City Assets	Ward	17	Year o	f Completion:	2023	
				2022 Request	400	Projected Yeare	nd Unspent Bal.	0
	gn and replacement of concrete tree well	covers on Bank Street (Glebe) due to	pre-	Revenues	0		Debt	
mature		Tax Supported/ Dedicated	400	Tax Supporte Debt	d/ Dedicated	0		
				Rate Supported	0	Rate Support	ed Debt	0
		Develop. Charç	Develop. Charges	0	Develop. Charges Debt		0	
				Gas Tax	0	Gas Tax Debt		0
				Forecast	2022	2023	2024	2025
				Authority	400	0	0	0
				Spending Plan	400	0	0	0
				FTE's	0	0	0	0
				Operating Impact	0	0	0	0

City of Ottawa 2022 Draft Capital Budget Environment and Climate Protection Committee-Tax In Thousands (\$000)

Service Area: Solid W	ervice Area: Solid Waste													
									Debt					
Category	2022 Draft 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	5,000	0	4,000	0	0	0	1,000	0	0	0	1,000			
Growth	620	0	620	0	0	0	0	0	0	0	0			
Regulatory	20,950	0	2,950	0	0	0	18,000	0	0	0	18,000			
Service Enhancements	1,925	0	1,925	0	0	0	0	0	0	0	0			
Total	28,495	0	9,495	0	0	0	19,000	0	0	0	19,000			

111 11100	ısands (\$000)								
	Program Inf	ormation	Financial Details						
Solid W	/aste Facilities Renewal		Class	lass of Estimate: Not Applicable					
Dept:	Public Works & Environmental Services Department	Category: Renewal of City Assets	Ward:	Multiple	Year o	f Completion: \			
			_	2022 Request	5,000	Projected Yearen	d Unspent Bal.	0	
maint	Waste Landfill buildings and disposal pro enance, repair and upgrade to meet regu		е	Revenues	0		Debt		
Provir	ncial Certificate of Approval.			Tax Supported/ Dedicated	4,000	Tax Supported/ Dedicated Debt		1,000	
				Rate Supported	0	Rate Supporte	d Debt	0	
				Develop. Charges	0	Develop. Charges Debt		0	
				Gas Tax	0	Gas Tax Debt		0	
				Forecast	2022	2023	2024	2025	
				Authority	5,000	8,000	6,500	28,000	
				Spending Plan	5,000		6,500	28,000	
				FTE's	0	0	2	0	
				Operating Impact	0	0	1,000	2,000	

In Thousands (\$000)

Project(s) within a Program Information						\$000's
906167	Leachate Treatment Facilit	У			Class of Estimate: Not Applicable	1,000
Category:	Renewal of City Assets	Ward:	CW	Year of Completion:	2023	

Leachate management is required at the Trail Waste Facility to prevent the contamination of groundwater and surface water on surrounding properties. The management of leachate is regulated by the Ministry of the Environment Conservation and Parks (MECP). Leachate generated by the unlined portions of the Trail Road Landfill (Stage 1 and 2) is managed through MECP approved monitored natural attenuation. To manage leachate generated in the lined portions of the landfill (Stages 3 and 4, and future Stage 5), an on-site full scale leachate treatment system with effluent discharge to surface water received approval as the preferred option of an environmental assessment undertaken by the City in 2005. The full-scale treatment facility will be required in advance of vertical expansion of Stages 3 and 4, anticipated in late 2014/early 2015. In 2012, the City obtained updated information on the discharge criteria required by the MECP for discharge to surface water and an updated cost estimate for the construction of a full - scale treatment facility. The technology required to meet discharge requirements has escalated in cost since initial project estimates were made in 2005. Funds are required to design and build the leachate treatment facility. This will now include condition assessment of pre-treatment facility and rehabilitation.

New year of completion is 2027.

909430	Nepean Landfill Cap Repa	ir	Class of Estimate: Not Applicable	1,500
Categor	y: Renewal of City Assets	Ward: 21	Year of Completion: 2023	

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.

909894 Trail Road Groundwater M	Management	Class of Estimate: Not Applicable	1,000
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	

Project to control and contain contaminated groundwater. Within Trail Road site and prevent contamination of nearby developing community.

In Thousands (\$000)

Project(s) within a Program Information							\$000's
910585	Soil Management Facility				Class of Estimate: Not Ap	plicable	1,000
Category:	Renewal of City Assets	Ward:	CW	Year of Completion:	2030		

As a result of incoming waste soil and large volume of soil to be excavated from the Stage 5 development, landfill operations require interim soil storage options to mitigate soil storage related space constraints. The soil facilities are intended to aid in soil management activities at the site. To this end, existing City-owned landfill bufferland properties (4460 Trail Road and 4384 Cambrian Road) will be formally integrated into Trail's environmental approvals, along with associated requirements for soil management activities. The bufferland properties will require reconfiguration to allow for stockpiling and storage activities of soils for use in ongoing landfill operations.

910586	Renewal of SW Facilities		Class of Estimate: Not Applicable	500
Category	Renewal of City Assets	Ward: CW	Year of Completion: 2030	

Funding to support proactive assessments and renewal requirements of the Solid Waste Facility buildings, including the Administration building, Scale house, HHW and former Plasco building and landfill components.

	Program In	formation		Fina	ncial Details					
olid W	aste Landfill Management		Class	of Estimate: Not Applicable						
ept:	Public Works & Environmental Services Department	Category: Regulatory	Ward:	Multiple	Year of	f Completion: Various				
		•		2022 Request	20,950	Projected Yearen	d Unspent Bal.			
meet r	rail Road Solid Waste Landfill requires a regulatory requirements as specified in t	he Provincial Certificate of Approv	val. This	Revenues	0					
contair	nment solutions, cell expansion and oth	consists of landfill capping of various stages, gas collection systems, groundwate nent solutions, cell expansion and other landfill management projects to keep the perating efficiently, effectively and in compliance.		Tax Supported/ Dedicated	2,950	Tax Supported Dedicated Deb		18,00		
		Rate Supported Develop.		Rate Supporte						
			Charges		Develop. Char	ges Debt				
				Gas Tax	0	Gas Tax Debt				
				Forecast	2022	2023	2024	2025		
				Authority	20,950	27,950	13,114	2,95		
				Spending Plan	20,950	27,950	13,114	2,95		
				FTE's	0	0	0			
				Operating Impact	0	0	0			
							·			

In Thousands (\$000)

	Project(s) within a Program Information							
907614	Barnsdale Base Preparation	n			Class of Estimate: A) Pre-Tender	1,000		
Category:	Regulatory	Ward:	21	Year of Completion:	2023			

As a result of residential growth and increased diversion efforts of leaf and yard waste, there is an ongoing requirement to expand the existing processing facility, implement seasonal temporary collection transfer stations across the city and for processing an increasing quantity of the incoming materials. Each spring and fall, a peak period is determined in which leaf and yard waste is collected as a single stream material as part of the city's existing waste collection contract. Transfer station(s) are established strategically in the city before these materials are then hauled to the Barnsdale Road processing facility. Costs for labour, equipment, contracted services and facility rental/maintenance is required to establish transfer station(s) and move material to Barnsdale Road. With increasing leaf and yard waste quantities incoming, expansion of the processing pad is required. This expansion includes the excavation of native materials, purchase of new base and surface materials as well as the equipment and labour to construct. Materials on site must be managed regularly and costs related to additional equipment, labour and technological devices are required.

907799	Landfill Disposal Stage 5 D	Development	Class of Estimate: Not Applicable	18,000
Category	: Regulatory	Ward: 21	Year of Completion: 2024	

Stage 5 of the Trail Waste Facility is a new cell approved by the MECP in the 2005 Trail Waste Facility Optimization EA. A leachate liner must be installed over one half of Stage 5 (5a) by 2025 to support ongoing waste management requirements at Trail. To develop this stage a leachate liner must be designed, the site excavated and liner installed. The engineering aspects of this work commenced in 2020 to approve any variance from the proposed EA design.

910199	Trail Road Landfill - Expan	sion & Developmer	Class of Estimate: Not Applicable	950
Category	: Regulatory	Ward: 21	Year of Completion: 2021	

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

New year of completion is 2023.

In Thousands (\$000)

Project(s) within a Program Information					
910210 Trail Road Gas Collection	System Expansion		Class of Estimate:	Not Applicable	1,000
Category: Regulatory	Ward: 21	Year of Completion:	2022		

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.

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 an abatement plan 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 year of completion is 2023.

	Program Ir	formation			Fina	ncial Details		
Fleet - PW Growth Class of				s of Estimate: Not Applicable				
ept:	Public Works & Environmental Services Department	Category: Growth	Ward:	ard: Multiple Year of Completion: Various				
				2022 Request	620	Projected Yearend	d Unspent Bal.	
expan	Waste Fleet requires growth to meet th iding diversion and landfill processing n	ds of the City's service areas,		0		Debt		
	iding house counts, increased tonnages ement to increase diversion capacities		Tax Supported/ Dedicated	620	Tax Supported Dedicated Deb			
ориос	•			Rate Supported	0	Rate Supported	d Debt	
				Develop. Charges		Develop. Charg		
				Gas Tax	0	Gas Tax Debt		
				Forecast	2022	2023	2024	2025
				Authority	620	500	0	
				Spending Plan	620	500	0	
				FTE's	0	0	0	
				Operating Impact	0	0	0	

Project(s) within a Program Information					\$000's		
909627	Solid Waste Fleet Growth				Class of Estimate:	Not Applicable	620
Category:	Growth	Ward:	21	Year of Completion:	2022		
	aste must purchase 2 single sar of completion is 2023.	stream o	collection vel	hicles for growth in Zone 5 at tota	ıl cost of \$620,000.		

Program Information				Financial Details				
Solid Waste Studies Program			Class	s of Estimate: Not Applicable				
ept:	Public Works & Environmental Services Department	Category: Service Enhancements	Ward:	Multiple	Year of	f Completion: `		
			•	2022 Request	1,925	Projected Yearen	d Unspent Bal.	C
the City	g and managing the development, impl 's long-term Solid Waste plans and rela		Revenues	0	Debt			
years. F	s that will guide the management of rec Funding is required for the projects supposed in the projects supposed in the projects of the project o		Tax Supported/ Dedicated	1,925	Tax Supported Dedicated Det		(
engagement series 3, city-wide waste audits, multi-residential diversion strategy implementation, review of the waste collection contracts, parks recycling pilot project, residual waste management strategy development, implementation of IPR and other waste management and diversion priorities.				Rate Supported	0	Rate Supported Debt Develop. Charges Debt		(
				Develop. Charges				(
				Gas Tax	0	0 Gas Tax Debt		(
				Forecast	2022	2023	2024	2025
				Authority	1,925	2,510	1,000	(
				Spending Plan	1,925	2,510	1,000	(
				FTE's Operating	0	0	0	(
				Impact	0	0	0	(

In Thousands (\$000)

		Project(s) within a Program Information					
909431	Long Term Planning		Class of Estimate: Not Applicable	1,925			
Category:	Service Enhancements	Ward: CW	Year of Completion: 2023				

Planning and managing the development, implementation, evaluation and enhancement of the City's long-term Solid Waste plans and related policies, programs, services and projects that will guide the management of recyclables and garbage over the next thirty years. Planning and reviews began in 2019 and additional funding is required for the projects supporting the Solid Waste Master Plan, review of the waste collection contracts, various recycling pilot projects and other waste management and diversion priorities.

New year of completion 2025.

City Of Ottawa 2022 Draft Capital Budget

Standing Committee on Environmental Protection, Water and Waste Management - Tax Four Year Forecast Summary

In Thousands \$(000's)

In Thousands \$(000's)					
Project Description	2022	2023	2024	2025	Total
Environment					
Service Enhancements					
908894 Natural Area Acquisitions (Rural)	2,000	2,000	2,000	2,000	8,000
910568 Energy Management & Invest Strategy 2022	3,000	3,000	3,000	3,000	12,000
Service Enhancements Total	5,000	5,000	5,000	5,000	20,000
Environment Total	5,000	5,000	5,000	5,000	20,000
Parks, Buildings, & Grounds					
Renewal of City Assets					
910479 Forestry - Concrete Tree Well Covers	400	0	0	0	400
Renewal of City Assets Total	400	0	0	0	400
Parks, Buildings, & Grounds Total	400	0	0	0	400
raiks, buildings, & Grounds Total	400	•	•	•	
Solid Waste					
Renewal of City Assets					
906167 Leachate Treatment Facility	1,000	0	0	21,000	22,000
909399 Trail Road Landfill Cap Repair	0	0	0	1,000	1,000
909430 Nepean Landfill Cap Repair	1,500	0	0	0	1,500
909894 Trail Road Groundwater Management	1,000	5,000	5,000	5,000	16,000
910585 Soil Management Facility	1,000	2,000	0	0	3,000
910586 Renewal of SW Facilities	500	1,000	1,500	1,000	4,000
Renewal of City Assets Total	5,000	8,000	6,500	28,000	47,500
Growth					
908686 Solid Waste Fleet Growth - Landfill 2019	0	0	550	0	550
909627 Solid Waste Fleet Growth	620	500	0	0	1,120
910587 Solid Waste Fleet Growth - Special	0	245	0	100	345
Growth Total	620	745	550	100	2,015

City Of Ottawa

2022 Draft Capital Budget

Standing Committee on Environmental Protection, Water and Waste Management - Tax Four Year Forecast Summary

In Thousands \$(000's)

Project Description	2022	2023	2024	2025	Total
Regulatory					
907352 Landfill Stage 3 Capping	0	0	8,664	0	8,664
907614 Barnsdale Base Preparation	1,000	1,000	1,000	1,000	4,000
907797 Landfill Stage 4 Capping	0	0	0	1,000	1,000
907799 Landfill Disposal Stage 5 Development	18,000	25,000	1,500	0	44,500
910199 Trail Road Landfill - Expansion & Develo	950	950	950	950	3,800
910210 Trail Road Gas Collection System Expansi	1,000	1,000	1,000	1,000	4,000
Regulatory Total	20,950	27,950	13,114	3,950	65,964
Service Enhancements					
907354 Solid Waste Business Technology	0	1,000	1,000	0	2,000
909431 Long Term Planning	1,925	2,510	1,000	0	5,435
Service Enhancements Total	1,925	3,510	2,000	0	7,435
Solid Waste Total	28,495	40,205	22,164	32,050	122,914
Grand Total	33,895	45,205	27,164	37,050	143,314

City Of Ottawa
Capital Works-In-Progress as at August 31, 2021
Standing Committee on Environmental Protection, Water and Waste Management - Tax In Thousands \$(000's)

In Thousands \$(000's) Project Description	Authority	Expenditures	Unspent Cash Balance	Total Contractual Obligations	Unspent Balance including Contractual Obligations
Environment					
905937 2016 Rural Area Acquisitions	1,160	637	523	5	518
906381 AQCCMP Implementation	374	174	200	84	115
907985 Energy Management & Invest. Strategy SI	4,000	4,599	-599	40	-639
908017 Green Fleet - 2016	1,222	1,165	57	55	2
908869 Green Fleet	500	430	70	53	18
908880 Energy Evolution	3,248	584	2,665	320	2,344
908894 Natural Area Acquisitions (Rural)	2,340	188	2,152	0	2,152
909139 AQCCMP National Disaster Mitagation Prog	61	36	25	8	17
909151 Community Energy Intitiatives	500	439	61	12	49
909255 Renewable Energy Transition Projects	633	477	156	73	83
909452 Energy Mgmt & Investment Strategy 2019	2,000	1,880	120	101	19
909607 Climate Emergency	440	290	150	0	150
909836 Energy Mngmnt & Invest. Strategy 2020	3,000	2,973	27	445	-418
909865 2020 Natural Area Acquisitions (Urban)	2,045	0	2,045	0	2,045
910169 Energy Management & Invest Strategy 2021	3,000	380	2,620	1,203	1,417
Environment Total	24,523	14,251	10,272	2,400	7,873
Solid Waste					
906167 Leachate Treatment Facility	7,350	6,540	810	703	107
907043 Springhill Landfill	700	12	688	0	688
907238 Landfill Disposal Stage 2 Capping	23,423	21,134	2,288	1,677	611
907352 Landfill Stage 3 Capping	9,064	2,060	7,004	4,584	2,420
907353 Trail Rd Gas Collection System Expansion	7,500	7,042	458	50	408
907354 Solid Waste Business Technology	600	65	535	0	535
907611 Trail Road Stormwater Ponds and Ditches	400	112	288	0	288
907614 Barnsdale Base Preparation	300	167	133	86	47
907659 Leachate Recirculation	150	0	150	0	150
907799 Landfill Disposal Stage 5 Development	1,811	455	1,356	987	369
907815 Trail Road Landfill - Exp & Development	1,400	1,015	385	225	159
907816 Groundwater Management	1,450	1,001	449	67	383
908686 Solid Waste Fleet Growth - Landfill 2019	420	418	2	0	2

City Of Ottawa

Capital Works-In-Progress as at August 31, 2021

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

In Thousands \$(000's)

Project Description	Authority	Expenditures	Unspent Cash Balance	Total Contractual Obligations	Unspent Balance including Contractual Obligations
909431 Long Term Planning	4,900	2,138	2,762	725	2,036
909627 Solid Waste Fleet Growth	1,500	1,506	-6	0	-6
909742 Solid Waste Fleet Growth	230	69	161	145	16
909894 Trail Road Groundwater Management	5,150	543	4,607	73	4,534
910198 Small Load Relocation	250	0	250	0	250
910199 Trail Road Landfill - Expansion & Develo	1,277	395	883	0	883
910210 Trail Road Gas Collection System Expansi	1,000	485	515	7	508
Solid Waste Total	68,875	45,157	23,718	9,329	14,389

Grand Total	93.398	59.408	33.990	11.729	22.261